THE BUILDER

A Journal for the Architect & Constructor

DECEMBER 7, 1928 No. 4479

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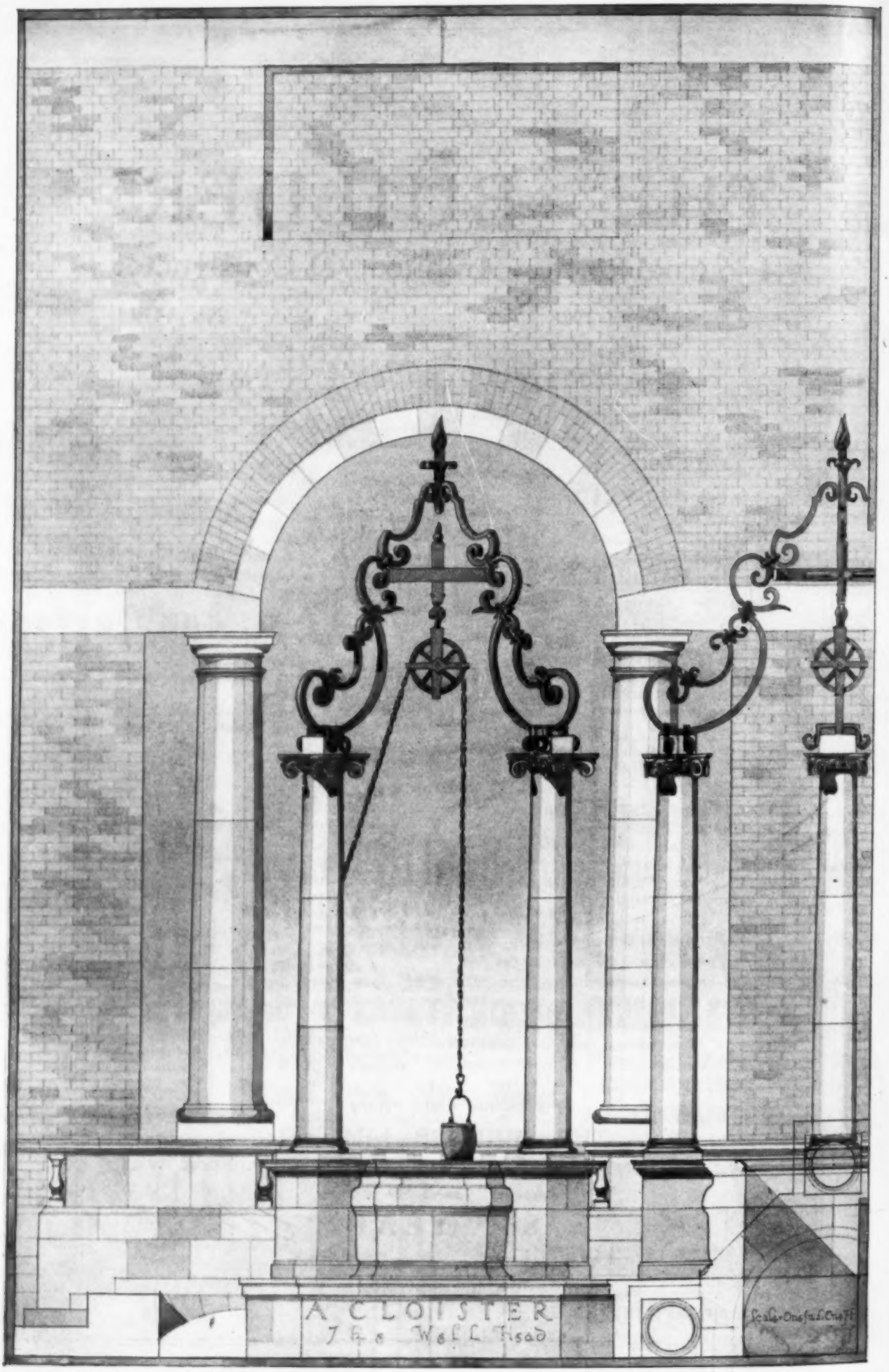
86TH YEAR



British Institution Scholarship in Architecture.

"A Cloister enclosing a Laid-out Garden": Winning Design. Detail of Well Head.

By Mr. Arthur L. Hall (Polytechnic School of Architecture).

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXXV. No. 4479. DECEMBER 7, 1928

THE HEIGHT OF HABITABLE ROOMS

IT is extraordinary how much mixed motives will confuse a comparatively plain issue, and how much inclined people are to conceal their real motives and produce only afterthoughts which they think may pass muster for motives with unsympathetic opponents. It is an unfortunate trait, because there is really nothing so convincing as a conviction, and nothing so unconvincing as cold logic that does not come from the heart.

Let us take this old resurrected subject of the height of rooms. We are surely sufficiently enlightened to be able to agree upon the necessities of health, and we certainly should agree about the minimum height of rooms if we were concerned only with the question as one of hygiene. We should, in such circumstances, probably link the question at once with that of the size and position of windows, and should probably agree upon a rule that, provided the windows were placed in efficient positions, and of adequate size, the ceiling might be low enough to leave only sufficient air space above headroom to hold the last clinging murk in a well-ventilated room above the heads of the occupants. There might be some little difference in opinion as to what this exact allowable height might be, but in general principle there could be little difference, and the law makers might have the comparatively easy task of splitting the last six inches in reasonable compromise. But it has become not a plain issue of health. Confusing it are questions of cost, which cannot be ignored so long as building remains at its present level of cost; of prejudice, which seems the inevitable factor in human discussions; and of æsthetic preferences, which generally defy definition and are the hardest to argue upon.

The question of cost is an important one, and to draw the line fairly between sensible economy and cheeseparing is a task difficult enough, but not impossible of solution. The various partisans of high or low rooms are apt to start upon false assumptions. We have heard the question argued as though the cost of building depended upon the cost of a cubic foot of air. Cube is a useful guide as to cost, but the estimator who becomes a slave to it is riding for a fall. To assume that so many cubic feet of room cost a more or less fixed amount, and that this can be disposed at will into height or floorspace is neither scientific nor correct. To raise a building that is already set out by so many extra courses is an exact matter of proportionate cost, easily arrived at. To increase floor area may mean not only extra material of the same character but heavier material to meet bigger spans—a more involved matter of cost affecting not only the theoretical expansion, but the theoretical datum. We mention the point not because we favour building upwards more than laterally, but because as a false premise it does more harm than good to its argument. When this question was last discussed in our columns some years ago this was a frequent and weak plank in the arguments of some of our correspondents.

Upon the question of prejudice we are upon more ephemeral ground. The conviction of the few thinkers of a community becomes in time the prejudice of public opinion. There are still quite a number of people who profess to be horrified at the idea of rooms less lofty than were fashionable for respectable middle class folk of a generation or two ago. In a recent issue of the *Times* a correspondent draws attention to this sort of outlook and compares the greater lattitude allowed in modern work upon the Continent. Waste of all sorts is to be deplored, and if no value at all is gained from a height of room greater than a certain minimum, this becomes a kind of waste. In this, again, we must hesitate to follow exactly all examples which our neighbours on the Continent may set. In several recent visits of representatives from professional bodies in this country to the Continent, a number of building practices were observed that would never be tolerated in a working-class scheme in this country, let alone among the more critical classes.

The æsthetic aspect is still more vague. There is more than one standard of consistency in architectural design. The soaring verticality of the Gothic is no less unlike the calm horizontality of the classic than is the low cosy warmth of the Elizabethan farm house interior compared with the lofty dignity of a Queen Anne mansion. Those who choose the one or the other as their standard of taste, rejecting the merits of the other, are simply adopting an incomplete diet, and starving themselves of much that would nourish their sense of beauty. The vertical proportions of a fine sash window are as absurd when crowded between the floor and ceiling of a low room as is the long low many-mullioned window lost in the expanse of wall space of a lofty room. In either case, the choice of consistency has to be made once for all for each job, and a rule that suits the one choice, is of little service to the other.

We are convinced that many of the protagonists of one or other side of the controversy are mainly protagonists of a particular architectural style; and that to such as these, questions of cost or hygiene are merely subsidiary supports to the argument. Some are convinced that eighteenth-century dignity is the only fit framework upon which to hang the architectural expression of our times. Others see in the latitude of the fifteenth-and sixteenth-century farmhouse plan the best chance of disposing to the best advantage our modern ingenuity in domestic planning. Under such conditions the height of rooms becomes merely a matter of architectural consistency, little related to the health of the occupier or the pocket of the builder. We would recommend all these people to clear their minds of cobwebs, and remember that the character of modern building depends on the literal building practice neither of the fifteenth or eighteenth centuries, but entirely on that of the twentieth century.

If modern convenience and economic building demand the rambling type of plan, let it by all means have it; and if modern ideas of hygiene demand a certain degree of airspace in habitable rooms let it have it at the same time as the other. For our own part, we believe that the architects of this century are competent to treat with taste any proportion of room that practical considerations may dictate. We also incline to the view that the height of eight feet from floor to ceiling which is permitted under the relaxed by-laws of most districts in this country, is a sensible minimum, the enforcement of which entails no real hardship upon any section of the community. We would not oppose a reduction of this height by perhaps six inches, but the difference is to our mind too little to warrant an agitation.

Before closing the subject we would refer to the contention that is sometimes made that this sort of thing, so far as it affects private building for the individual, is purely a matter for the individual, and that he should be free to choose the conditions under which he has to live. We believe that this is a fallacy unworthy of the responsibilities of building. A house is truly built for the individual, but it becomes at once the concern of the community because it lives (or should live, if it is built with a sense of responsibility) far longer than the individual and so concerns many whose choice was never consulted. It is for this purpose that building by-laws have been framed, and while we should be the last to argue that the by-laws as they stand are incapable of improvement, we should do very little service to the world of building if we claimed a licence which the community has already voluntarily forgone.

NOTES

The Architectural Association.

AN admirably arranged little pamphlet on the Architectural Association has just been issued, with attractive well-selected views, exterior and interior, of the premises in Bedford Square. The three houses which the Association now occupies were built by the architect, Mr. Leverton, in 1780, and make a very pleasing and commodious home for the Association. There are, as our readers know, several interesting architectural features in the interior, the best of which have been happily photographed. The library is quite a fine room, and is really much larger than the view of it would suggest. This was opened in 1921, as a memorial to members killed in the great war. Over eighty years have passed since the formation of the Association, and it must be a source of much satisfaction to the profession that it should be able to produce such a pleasing record of its location in one of London's most beautiful squares.

Free Expert advice under Housing Act.

WE are interested to see that in Circular No. 940 the Minister of Health has brought to the notice of local authorities arrangements which have been made, with his approval, by the Council for the Preservation of Rural England, acting in co-operation with the Royal Institute of British Architects for giving expert advice, free of charge, on the carrying out of works of repair and reconditioning under the Housing (Rural Workers) Act, 1926. Under this Act assistance cannot be given in the case of a house or building to which any historical, architectural or artistic interest attaches if the proposed works would destroy or seriously diminish that interest, and special attention was drawn in Circular No. 756 to the importance of seeing that works should be so carried out as not to impair the appearance of cottages or to detract from the amenities of the district. "To secure this end," Circular 940 proceeds, "it is clearly desirable that advice and guidance should be available from those who have expert knowledge and experience in this class of building. Architects and others interested in the matter have been anxious to give their help in this work, and the Council for the Preservation of Rural England, in conjunction with the Royal Institute of British Architects, have now set up panels covering all parts of England and Wales which will be available for giving advice—

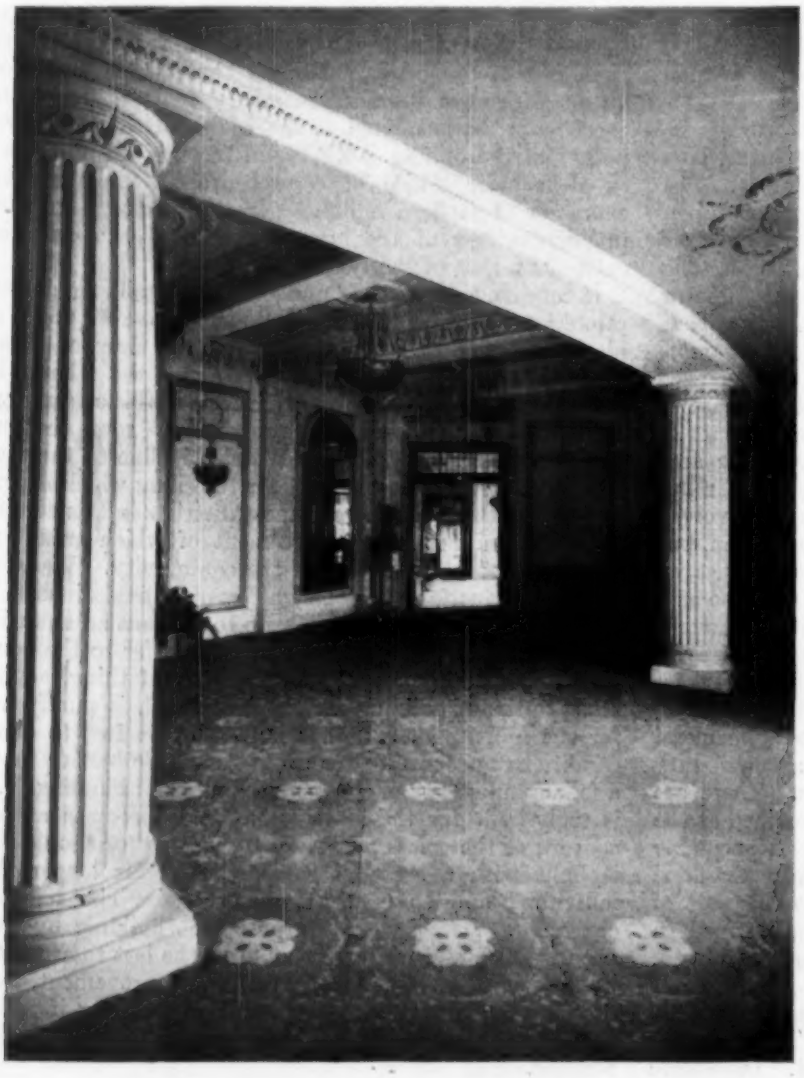
"(1) To owners who want the best technical assistance in improving their cottages without spoiling their appearance; and

"(2) To local authorities who want some assurance that the proposed reconditioning works will not spoil the picturesque appearance or destroy the historical character of the cottages."

No charge will be made for such advice, but applicants will be expected to defray any travelling expenses which may be incurred.

Preservation of Amenities of Rural Areas.

THE panels which have been constituted for the purpose described above have expressed a willingness to assist local authorities and others in the general preservation of the amenities of rural areas, not only in connection with the Housing (Rural Workers) Act, but also in connection with town planning schemes; and local authorities and developing owners can advantageously avail themselves of this assistance. "As the Minister has emphasised from time to time," says the Circular, "the best results are likely to be obtained in friendly co-operation between local authorities and land-owners and developers. Many of the difficulties which occur would be obviated if there were consultation at the earliest stage of proposals, a better understanding of each other's points of view, and more knowledge of how much can be done, with due regard to finance and private interests, to avoid development which may be a disfigurement. A list of Associations and Societies affiliated to the Royal Institute of British Architects is appended. Those wishing to make use of the help offered by the panels should communicate with the Convener of the panel for the area concerned or, where no Convener is indicated in the list, with the Secretary of the nearest affiliated Association or Society, who will at once put them in touch with the appropriate panel."



The Regal Cinema, Marble Arch, W.: Detail of Circle Lounge.
MR. CLIFFORD AISH, F.S.I., Architect.

The Local Government Bill and Town Planning.

SOME of the most interesting clauses in the Local Government Bill for 1928 relate to Town planning. Under the Bill all highway powers of rural district councils, and all classified roads in urban districts and non-county boroughs are, as we pointed out in an article last week, transferred to County Councils. This is only carrying out the proposals that have been put forward in many quarters that County Councils, in order to co-operate effectively in town and regional planning, should have more powers in providing an adequate system of roads. The Bill, indeed, goes further by making the County Council the principal road authority outside the County Boroughs. It is important, however, that elasticity should be allowed in some counties, where capital towns are inconveniently situated and where their size is unwieldly. One of the advantages of the existing Joint Town Planning Committees, which now cover more than a quarter of the country, is that they represent actual geographical units without regard to artificial boundaries. The

Robert of Normandy, Gloucester Cathedral (early 12th Century).

(*See page* 928.)

promoters of the Bill have, however, clearly recognised that joint town planning action should be continued and provide for co-operation. The whole outlook of County Councils with regard to roads will have to be modified if the Bill passes in its present form. Instead of being solely concerned with classified roads, they must consider local needs. They must realise that public opinion will be strongly hostile to the unnecessary cutting down of trees or the destruction of a landscape. Furthermore, they will have to consult local councillors in order to meet local needs and desires. County Councils must, too, look ahead with regard to the provision of aerodromes The granting of further powers to County Councils carries with it heavy responsibilities, but, if used with discretion, will facilitate regional planning still further.

The Legion of Honour. WE are informed that the French Government have awarded the Cross of the Legion of Honour, conferring the title of Chevalier, to Mr. Albert J. Thomas, F.S.A., F.R.I.B.A. Mr. Albert Thomas has been connected for many years with the Institut Français in London as member of the Council and Hon. Architect to the Institut. A Fellow of the Royal Institute of British Architects and a member of several professional societies, Mr. Thomas has been associated with Sir Edwin Lutyens, R.A., in various works since 1902, including the Cenotaph in Whitehall, London, the British Cemetery at Etaples and other British Cemeteries in France and Belgium, the British School of Art in Rome, Government House and the New City of Delhi, India, and also in the execution of the Queen's Doll's House.

The Old School Board Offices. IT is interesting to note that the former offices of the London School Board on the Embankment have been sold for £310,000 to the Eastern Telegraph Company, whose offer of that amount has been accepted by the London County Council. It will be remembered this was one of Mr. Bodley's most successful buildings, it having been enlarged and the clock tower added by Colonel Edis.

Noise. IT has now been announced by the British Medical Association that any noise jarring to the nerves is harmful and inevitably leads to further trouble in the human system. This warning is probably all that is required by this nervous age to stir it into action. The next great problem to be tackled is ugliness acting on eyesight, the nervous system and mental depression. Unfortunately this subject will not be scheduled as a disease while there remain a few places unspoilt.

The R.I.B.A. Meeting. AT the special general meeting of the R.I.B.A. on Monday last it was decided to ratify the provisional agreement between the R.I.B.A. and the Architectural Association for the sale of No. 28, Bedford-square. This action, we take it, is in pursuance of the policy of the Institute to build new premises. At the third general business meeting which followed, the proposed amendment of the regulations governing architectural competitions (set forth on page 899 of our last issue) was also agreed to. The following elections were made to the class of Hon. Associates:—E. B. Chancellor, M.A. (Oxon), F.S.A.; Captain W. T. Creswell, Barrister-at-Law, Associate, Surveyors' Institution; W. Hanneford-Smith, F.R.S.E., Assoc. Inst.C.E.; D. S. MacColl, M.A. (Lond.), LL.D. (Glasgow), Litt.D. (Oxon); T. H. Ross, M.A., Mus. Doc., F.R.C.O., Hon. Canon and Canon Precentor of Leicester Cathedral; Major-General Sir F. A. G. Ware, K.C.V.O., K.B.E., C.B., C.M.G. Captain Creswell, we may add, is well known to our readers as a lecturer and writer on legal questions affecting architects and builders. Before the war he practised as an architect and chartered surveyor for some years, but in recent years he has practised at the Bar.

"Queen Margaret" Statue, Lincoln Cathedral (1300).

(*See page* 928.)

Photo: S. Smith.

Lincoln Cathedral: Romanesque Wall Decoration (1070-1090.)

(*See page* 928.)

GENERAL NEWS

St. Peter's-upon-Cornhill.

The roof of St. Peter's Church, Cornhill, has been badly damaged by the depredations of death-watch beetles.

Proposed New Exhibition Hall on Foundling Site.

We learn that there is a proposal on foot to build an exhibition hall and shops upon the site of the Foundling Hospital in Guilford-street, W.C., and that Sir Giles Gilbert Scott, R.A., has been invited to prepare preliminary plans for the building. The promoters are believed to be a private syndicate, but it is understood that negotiations have not yet proceeded beyond the proposal stage.

Sir F. Dicksee's Estate.

Sir Francis Bernard Dicksee, K.C.V.O., D.C.L., the late President of the Royal Academy, who died on October 17, aged 74, left estate valued for probate at £37,905. His will, which is dated May 15, 1886, directs the executors in their absolute discretion to withhold from sale or destroy if advisable any sketches, unfinished works, or other of his productions which they may have reason to think he would not have desired sold or disposed of, as being calculated to injure or affect his professional reputation.

Proposed New City Street.

At a meeting of the Corporation of the City of London on November 29, it was decided to refer to the Improvements and Finance Committee the formation of a new street from the approach to the Tower Bridge to Aldersgate-street, over the line of the Metropolitan Railway. It is proposed to cover in the Metropolitan Railway between these two points. The actual distance needing cover is only about half a mile, since the remainder has already been covered by roadways.

Proposed Aerodromes at Hanworth and Gosport.

In connection with the scheme to establish aerodromes in various parts of the country, the company, of which Capt. the Right Hon. F. E. Guest, M.P., is the chairman, propose to convert Hanworth Park Estate into its headquarters. It is proposed to convert the mansion with its 25 bedrooms into a company's club as a nucleus for the whole of the organisation.

Messrs. John Laing and Son, Ltd., Mill Hill, N.W.7, have in hand an important contract, awarded by the Ministry of Air, for the erection of a large aerodrome, with aircraft hangars, workshops, stores, quarters, etc., at Gosport. The expenditure involved is in the region of £130,000.

Paris Building Collapse.

A case arising out of the catastrophe at Vincennes on October 18, which resulted in the death of nineteen workmen, was heard before the Twelfth Correctional Tribunal on Monday, when Provini, the director and proprietor of the house which collapsed, and Toscani, his foreman, had to answer a charge of homicide through negligence. Provini was sentenced to two years' imprisonment, with the benefit of the First Offenders Act, and fined 500 francs. Toscani was acquitted. According to the report of the experts who were appointed to inquire into the disaster, the contractor began to build the house without having consulted an architect. He did not work from a plan, but from a rough sketch made by an employee. Further, the contractor had been warned that he was building on ground that was not firm.

New Chapel at Bromsgrove School.

The governors of Bromsgrove School have under consideration the erection of a new school chapel. The architect is Sir Giles Gilbert Scott, R.A., 7, Gray's Inn-square, W.C.2.

The Chateaux on the Loire.

Sir Banister Fletcher, F.S.A., F.R.I.B.A., in a second lecture on the Renaissance architecture of France, at the Central School of Arts and Crafts, described the châteaux on the Loire, built in that newly-formed style which was the expression of the beauty of life and the unity of France. The handsome Renaissance palace took the place of the frowning "donjons" of the Mediæval castles. In the lovely valley of the Loire these palaces arose with a wealth and variety of skyline that made them natural features of the landscape, such as the Château de Chenonceaux, rising from its enchanted site, partly on the river and partly on the waterbridge. Sir Banister described also the Château of Blois, Chambord, and others, and showed lantern slides of them. These châteaux, said the lecturer, were the vignettes of French life of the period and were to the French what the manor-houses were to England, and represented that charming mingling of Gothic and Renaissance in which the French excelled.

British Institution Scholarship in Architecture.

Study of Ornament.

By MR. ARTHUR L. HALL.
(Polytechnic School of Architecture).

COMPETITION NEWS

Public Baths, Billingham.

Billingham U.D.C. has instructed a committee to select a site suitable for the erection of public baths; and has decided to invite designs for the project.

A Competition.

We draw attention to a competition announced on pages lxviii-ix which is open to all actually engaged in the building industry. Fifty prizes of £1 are offered. The closing date is Wednesday next, December 12.

MEETINGS

FRIDAY, *December* 7.

Surveyors' Institution (Junior Section). Annual Dinner. Connaught Rooms, W.C.2. 7 p.m.

Glasgow Architectural Craftsmen's Society. Mr. R. Maitland on "Architectural Lighting." 7.45 p.m.

SATURDAY, *December* 8.

Royal Institution. Mr. Walter Bayes on "The Gulf Between Painter and Public."

MONDAY, *December* 10.

Surveyors' Institution. Mr. F. G. Fleury on "The Recent Rating Acts in Operation." 8 p.m.

TUESDAY, *December* 11.

Illuminating Engineering Society. Mr. H. Lingard on "The Use of Electric Light for Advertising Purposes." At 15, Savoy-street, W.C.2. 6.30 p.m.

WEDNESDAY, *December* 12.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher on "French Renaissance: The Louvre and the Tuileries, Paris" 6 p.m.

Incorporated Institute of British Decorators. Mr. W. Park Douglas on "Some Themes that have influenced the Decorator." 8 p.m.

Northern Architectural Association. Lt.-Col. G. Reavell on "The Relation of Materials to Design." 7.30 p.m.

THURSDAY, *December* 13.

Institution of Structural Engineers. Mr. W. A. Hakin on "Wind Bracing in Steel-framed Buildings." 6.30 p.m.

London Master Builders' Association. Annual Dinner. Hotel Victoria, W.C.2. 7 p.m.

Society of Antiquaries. Mr. S. Toy on "Corfe Castle: Its History, Construction, and Present Condition." 8.30 p.m.

FRIDAY, *December* 14.

Town Planning Institute. Major R. H. S. Mealing on "The Establishment of Municipal Airports in Great Britain." 6 p.m.

The Value of Building Estates.

SIR,—I observe with interest your note in the issue of *The Builder* for November 23, in respect to restrictive stipulations as to value of building estates. On resuming my practice after the War I gave the matter a good deal of consideration, and adopted a principle of so many feet superficial floor area (either on one or two floors, according to whether it was a two-storied house or a bungalow), which has since been adopted by my clients on all the estates for which I act.

The advantage of this against a monetary stipulation will be obvious. Many old estates calling for houses of a minimum class, say, £700-£900 before the War, were then so far developed with quite nice type residences. The same restrictions now applying, post-War, means that the smallest villa only can be erected for the same figure, and a purchaser, while complying with his restrictions, is building comparatively a very much less valuable structure than his pre-War neighbours. On the other hand, with a superficial floor-area restriction the basis is fixed, whatever the price.

Needless to say, this restriction is governed by other restrictions, such as submission of plans and elevations for approval, etc.

H. J. HEWLETT.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

"The Builder" Model of the White Tower.

SIR,—I am directed to inform you that the very beautiful model of the White Tower which you have deposited in the Armouries of the Tower of London is now in position in its case with the lighting arrangement. This is done by batteries and small glow-lamps behind a thin screen of wood at the side of each floor. The lighting is put in action by a press button.

As far as I can judge the result is very satisfactory, and I can assure you this interesting addition to the collection is very greatly appreciated by the public.

CHARLES FFOULKES,
Curator.

The Tower of London.

The Abbey Sacristy.

SIR,—I have no wish to enter the lists against Mr. Leverton—on the score of professional competence I should probably be at a disadvantage. However, I would remind him that there is no lack of information to enable one to pass a reasoned judgment on the proposal for, as I understand, the Dean has put all his cards on the table so that even "the man in the street" as well as the professional mandarins may be able to judge of the rights and wrongs of the extraordinary proposal. A reasoned judgment on a matter of æsthetic interest is not necessarily the exclusive possession of the professional mind. It seems to be very often rather the reverse. Merely to play the unthinking advocate of the *status quo*, as Mr. Leverton does, will get us nowhere. I advise him to cast his mind—denuded of professional bias—back into the past, and just realise what "the highest professional skill available" has done in the interior of the great Abbey Church.

A parallel case occurs to me. Some years ago the professional authorities, no doubt all in good faith, had the temerity to restore the nose of the Demeter of Knidos at the British Museum. The crime was stopped, rightly so. According to Mr. Leverton, custodians of works of ancient art have a right to make additions backed by the highest professional skill available—surely a strange doctrine.

The plain truth is that there is no professional sculptor or architect living who is fit to restore the nose of the Demeter or to put an *additional* limb on to the Abbey. We have only to walk across Parliament-square and the proof stares us in the face, especially at the corner of Parliament-street and George-street. Let us keep "the highest professional skill" on that side of the square, if we have any regard for the memory of the work of Master Henry the King's Mason, and the later builders of the Lady Chapel.

The new sacristy destroys a unique vista of the work of these two periods of mediæval building, and on this account alone should be abandoned, and I am glad to know that a number of professional architects agree, and are saying so.

MAN IN THE STREET.

Collective Professional Advertising.

SIR,—With reference to your leading article of November 23, under the heading "Advertising the Architect." My argument was in favour of professional publicity on behalf of the profession as a whole, and not in regard to the desirability or otherwise of the architect advertising himself individually. You suggest that the real point is not whether it is disreputable or undignified for an architect to advertise his services, but whether it will do him any good. My point is that collective professional advertising will assist in convincing the public that they should retain an architect's services more frequently than is the case at present, and it was in this connection that I drew attention to the publicity method adopted by a group of American architects. We seem to be agreed on the point that the public is not alive to the great services which architects have to offer. Where we appear to differ is as to the means of changing this state of things. You suggest that there is no more probability of an architectural advertisement making the public love good building than of a soap advertisement making the unwashed instinctively clean. I suggest that the object of a soap publicity campaign is not to make the unwashed instinctively clean, but to persuade the public to purchase more soap, and on the same basis I suggest that collective architectural advertisement would have the effect of inducing the building public to purchase the services of an architect more frequently.

I gather that you object to any endeavour to achieve this end by what you describe as a commercial method, but in my judgment informed public opinion on any subject can be most effectively and rapidly formed through the medium of newspapers and technical journals; and I see no difference in principle in the method of conveying information to the public by means of correspondence or articles inserted free of charge in the literary pages of a paper and doing so more briefly through a paid advertisement.

Professional bodies have always devoted part of their funds to advertising the advantages they offer to members of the professions concerned. Why should they not also advertise the important services which their members can render to the public? I observe that one professional body has recently secured valuable publicity in this direction in the correspondence columns of a leading newspaper.

The R.I.B.A. is empowered by its Charter to apply its funds (*inter alia*) in promoting professional education and otherwise endeavouring to attain the objects of the Institute, the main one being the advancement of Civil Architecture. This is defined as being "an Art esteemed and encouraged in all enlightened nations as tending to promote the domestic convenience of Citizens and the public improvement and embellishment of Towns and Cities."

Will this art be best advanced by leaving its individual practitioners to their own devices in offering their services to that section of the building public which at present is largely ignorant of them, or by a sustained effort on the part of the R.I.B.A. to keep the public informed of the services which its members are competent to render?

If the profession of architecture had the same legal status as that of the registered professions, the building public would be no longer in any doubt as to where to go to find a qualified practitioner, and until that desirable state of affairs has been brought about, the profession of architecture ought, in my opinion, to adopt in the meantime the system which I advocate for attaining the same end.

C. MCARTHUR BUTLER, L.R.I.B.A.

The Housing Subsidy.

SIR,—The announcement this week of further reductions in the housing subsidy will arouse varied feelings. The National Federation of Building Trade Employers for some time past has been in favour of abolishing subsidies, whereas the Federation of Building Trade Operatives has been pressing for a continuance of the Wheatley subsidy for another five years. It is surprising, however, that a memorandum on the question of housing and unemployment in the building industry, dealing in great detail with subsidies, and recently issued by the National Housing and Town Planning Council, on the authority of Mr. Thomas Barron, president of the National Federation of Building Trades Operatives, should have been published in spite of its errors in facts and figures.

With the sincerity of the memorandum no one will disagree, but a document of this kind, fathered by the National Housing Council, should be above suspicion in regard to figures. Mr. Barron recalls the Building Trade Agreement of 1924, by which the industry was to increase its personnel and speed up production for a fifteen years' programme of 2,500,000 houses to be built *under the 1924 Act*. 60,000 men were to be taken into the trade. Mr. Barron states :—"The results are well known and surprised everyone by their magnitude. From the outset the estimated annual output was exceeded, and, instead of waiting until 1934 to reach the maximum yearly output of 225,000 houses, this figure was actually attained in 1927."

Mr. Barron is wrong in two particulars. In the first place, the programme for any one year has not been exceeded by the production of houses under the 1924 Act alone. Secondly, even when the houses built under the Chamberlain Act are added, the highest number built during 1927 was 204,723, not 225,000 as he states. Mr. Barron then fails to interpret the 1924 Act correctly, for he confuses the question of the *termination* of the subsidy with that of the *revision* of the subsidy.

Parliament provided for the termination of the Exchequer liability for housing unless there was an adequate rate of production. The matter was specifically stated: "The Minister of the Scottish Board of Health may make an Order to be submitted to Parliament, terminating the Exchequer liability (except in so far as houses have already been completed) in the event of the production of houses as ascertained triennially, falling short of two-thirds of the full programme proposed." For the successful execution of a scheme of such magnitude it was vital that the cost of building should be kept at a reasonable level. This depended upon the availability of labour, materials and capital at reasonable rates. The Government have power under the Wheatley Act in the event of the cost of houses being found, after full inquiry at any time, to be unreasonable, to terminate the Exchequer contributions.

Mr. Barron apparently has confused this *triennial* investigation with the review of the situation that has to be carried out *every two years*. It is in accordance with the provisions of the Act governing this biennial review that Mr. Chamberlain is now proposing to reduce the subsidy. He has consulted with representatives of local authorities, and as the cost of building and other conditions warrant the reduction, the contributions will no doubt be reduced next autumn.

Mr. Barron continues :—"The cost of housing was gradually being reduced when the Minister of Health decided to reduce the subsidy." The official figures do not justify any dogmatism either way on this subject. Parlour and non-parlour houses were costing at the end of 1924, £436 and £479 respectively; at the end of 1925, £439 and £492 respectively; at the end of 1926, £422 and £502 respectively; at the end of 1927, £434 and £450 respectively.

It is important in the interests of the building industry that political controversy should not distort facts, and for that reason I venture to point out certain of the errors in the Memorandum of the National Housing Council.

B. S. TOWNROE.

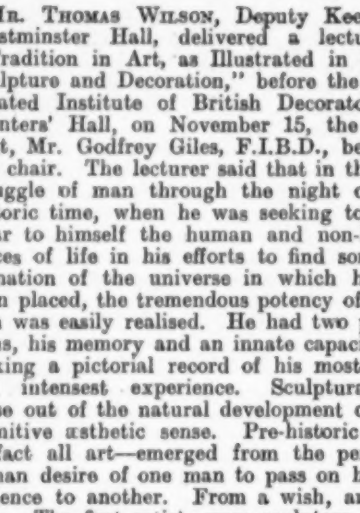
Proposed Bathing Pool, Brighton.

A £150,000 bathing pool is projected for Brighton. The new scheme is to come before the town council at a meeting in January, but in the meantime a deputation from Brighton, consisting of Alderman E. J. Pankhurst, the town clerk, and the borough surveyor, will travel to Southport, Lancashire, to inspect the municipal bathing pool there.

GOTHIC SCULPTURE AND DECORATIONS

MR. THOMAS WILSON, Deputy Keeper of Westminster Hall, delivered a lecture on "Tradition in Art, as Illustrated in Gothic Sculpture and Decoration," before the Incorporated Institute of British Decorators, at Painters' Hall, on November 15, the President, Mr. Godfrey Giles, F.I.B.D., being in the chair. The lecturer said that in the long struggle of man through the night of prehistoric time, when he was seeking to make clear to himself the human and non-human forces of life in his efforts to find some explanation of the universe in which he had been placed, the tremendous potency of tradition was easily realised. He had two possessions, his memory and an innate capacity for making a pictorial record of his most vivid and intensest experience. Sculptural art arose out of the natural development of that primitive æsthetic sense. Pre-historic art—in fact all art—emerged from the perfectly human desire of one man to pass on his experience to another. From a wish, art was born. The first artists were sculptors, image workers, and the traditional usages, religious and technical, governing the creation, followed later. . . .

It would be easy to show that all the great artistic achievement of the past sprang directly out of work deeply based on tradition, which flooded the collegia and schools, not as uniform monotonous usages and methods, but as a strong and powerful inheritance from one age to another. Without it no permanent and universal art creation for the future was possible. The sculpture of classic Greece, right from its archaic origins to the moment when it declined in the Hellenistic Age, spoke a language which on its own ground was æsthetically final. The tradition which it had passed on was still an operative and fructifying force. When the ancient world, submerged in a flood of barbarism, came to an end, it was the task of a new civilisation to rebuild a new moral world on the ruins. The mediæval Christian State and Church were the result. In what we had come to name as Romanesque and Gothic art, we saw reflected the spiritual and secular concepts of Early Christian Age and the mediæval world. Along a slow line of evolution, a period of at least a thousand years was required for the western races to reach that equilibrium which we saw manifested in



St. Hugh of Lincoln, St. Mary's, Oxford (1320).

the material miracles of the 13th century—Gothic sculpture. In achievement and originality, said the lecturer, he believed that that art, and not the sculpture of the High Renaissance, to be finally comparable with the equally great miracles in sculpture of the early classical age of Greece. As Ruskin pointed out, the *external* forms of Gothic were arches, vaulted spaces; its *internal* elements, mental and spiritual tendencies. Unless both were present, failure was certain. "It is not enough that it has the form, if it have not also the power and life."

The artists who produced the marvels of mediæval sculptural art were craftsmen, who, in the work of their hands, gave substance to the ideals and the disciplined standards and traditions of their age and faith. If we turned aside and looked at the miracles which they performed, and if we asked who created all this loveliness, we could only answer that frankly we did not know—we never could know. The secret of the personality, and the concern with the individual behind the creation was quite modern. It was all done chiefly out of a great tradition. We knew nothing about the sculptors who filled the West Front at Wells with their astounding creations as early as the 13th Century. Who was the genius who set out the Acropolis and divined the proportion of the Greek orders? We did not know. A few items in the fabric accounts told us all we knew of the workmen who built Chartres, Lincoln, and Wells, and Westminster Abbey.

The moment came at length when men turned away from mediæval Gothic traditional art and *rediscovered* the ancient art of classical times. That revised classicism in its origins was just the infiltration of rediscovered Greek culture into the mediæval mind. That created a new orientation; a new view of life and the neo-classicism of the 16th, 17th and 18th centuries was the result. The Renaissance then was not a revolt but a revival; it finally submerged, almost annihilated, the mentality and spiritual concepts of the mediæval age, but it was primarily an attempt to return to an ideal and pagan past—an idealisation of the ancient world. If the victory of classicism was partial, it was devastating as far as Gothic art was concerned. The transition took two centuries (1530 to 1730), and in England mainly by the genius of Inigo Jones and the patronage of Charles I., the Italian style became our national style. The result was a complete change in men's minds and attitude towards the art and tradition of the Gothic age. The life of the middle ages was overloaded and its spiritual secrets lost in the excitements of a revaluation of the concepts of religion and of political thought, and the Gothic spirit was submerged and suffered a complete eclipse. The attitude of men like Wren, John Evelyn, Wotton, and others towards an age which had created the mediæval mind and all its exquisite creations in art, was one of the most perplexing in the psychology of the artist mind. When one realised what architects like Inigo Jones did at Old St. Paul's, and Wren at St. Stephen's Chapel, one was amazed. The debasements they perpetrated could only have been the result of a strange insensitiveness to the glories of early Gothic art, to which their artistic responses appear to have been entirely blunted.

Wotton, in 1624, could write in his introduction to his "Elements of Architecture":—"Building hath three conditions, Commodite, Firmness and Delight." Yet when he comes to speak of the Gothic arch and vaulting he proceeds, "for their very Uncomelinesse ought to be banished from judicious eyes and left to their first inventors the Goths and Lombards, amongst the Reliques of a barbarous age." In this wise there grew a sort of accepted and unchallenged sentiment which came down, decade by decade, that the creations of the mediæval age were the work of barbarians. Wren, at St. Paul's, gave us what was the epitome of the classical movement; it represented the solid culture of a rich and growing class of merchant princes, based on the undecayed vigour of the 17th century craftsmanship, which had learned its art from the schools of Gothic tradition. Wren could not entirely divest himself of the tradition, and it was perhaps true to say that in the last analysis he was much more a Gothic than a classic artist. The spirit dominating his tower at Christ Church, Oxford, was Gothic, and where he showed the influence of traditional forces playing in his work, there he was greatest as an artist as distinct from a mere builder in a foreign idiom. The Gothic element was rarely absent altogether even in the 17th century, and its romance strangely touched the cold classic soul of Vanburgh before Horace Walpole began to thrill to the old Gothic creations and express his new-found emotion in his odd banalities at Strawberry Hill.

Such, as he construed it, said the lecturer, was the evolution on the positive side of tradition; but what of the negative aspect? Like all splendid forces it had its concomitant dangers. It was useless to deny the perils of the work of the traditionalists, the party which exalted tradition into a principle and lived by it. Apart from the use of the word to describe a vague sentimental appeal to the conservative instinct in most of us, any attempt to use tradition as a sanction for action either in art or social life at once gave rise to suspicion. The cry of revolt raised against tradition was that it was just the old stock-in-trade, as it had always existed of the party of the *status quo*. *Tradition was the enemy.* The pioneers of revolt spent themselves in persistent revolutionary resistance, and burst at last into their new worlds, as Vorticists, Futurists, Cubists, and the like, only to found new conventions, and perpetuate fresh traditions. What, then, in the end, asked the lecturer, was the reply to the question which he had posed? Had tradition any real practical value? In his opinion, it was of inestimable value when rightly and sanely comprehended and interpreted. In all the arts the need of the hour was to rescue tradition from the traditionalists. Tradition was more than the guardian of what-had-been, asserting its claim to be for ever what is. Tradition is much more than a mere watchword; it was a racial force, stored racial memory, out of which the thought and the spiritual life of man was daily and hourly fed. He wanted to suggest that assuming tradition to possess the immense positive value which he had claimed for it, and despite its negative dangers due to its misuse by our ineradicable conservative instincts, its greatest possible value lay in the fact that it was the inexhaustible source of all renewals and resurrections and renaissance in the arts. Would *our* renaissance satisfy

King, St. Mary's, Oxford (1320).

the new need of the coming epoch by recovering once again the contacts of a living tradition? Assuming that the chaotic forces of the present age would somehow, after all this agony of our day, be merged into a definiteness of purpose, and reach a unity of aim, which we could not at the moment detect, we could, he thought, rest in a certain faith, that once again there would arise a spiritual

ascendancy over the barbarism which threatened us at the moment, and the artistic anarchy which held European civilisation in its toils. A new age would reflect itself in the living traditions of a vital art, and, let us hope a spiritual and not exclusive material art. There were insistent voices charging us to return to the past from which we diverged at the Renaissance; voices calling us to return to the faith of mediævalism if we were ever to hope to regain what was lost. That we could never do—since it was intellectually impossible. New foundations there were none, but new adjustments, deeper union, profounder reflections, new inspirations to aid us to construct a new superstructure, these there must assuredly be. It was his contention, said the lecturer, that those must be laid on the old foundations of a real and vital tradition.

The lecture was illustrated with a series of slides, chiefly examples of English Gothic sculpture.

"THE BUILDER" DEBATE

XIII.—SHOULD ARCHITECTS ADVERTISE?

"That it is inconsistent with professional dignity for architects to advertise either individually or as a body."

SIR,—I shall be told that I am not marching with the times, and that I am tainted with the character of a snob; and am quite prepared for both. But after some heart-searching I am quite satisfied that I am neither old-fashioned nor undemocratic when I take up the position expressed in the above motion.

If I did not think that professional dignity was a real asset to the profession I would be perfectly willing to sacrifice it upon the altar of advertisement, for I consider the whole subject entirely in its relation to the good of the profession itself, and that of the community also. In other words, if I thought the profession would materially gain by advertising itself, without the remainder of the community suffering, I would ask to be "Negative" in this debate, or to take no part in it. The term "professional dignity" appearing in this motion is not therefore put in a snobbish sense at all, but merely expressing my conviction that the architect prospers if he retains a sensible dignity, and that he must ultimately suffer if he loses it.

In a recent leading article in *The Builder* you expressed the inevitable difference that must always remain between trade and profession. I am sure that the public realises, if only subconsciously, this inevitable difference. It is not a question of social superiority, but of an essential difference in social service. Many of our older commercial houses, which had developed an almost professional procedure towards their customers, are finding the need to revert to less aloof business methods; and I regard this not as a sign of what the architect must do to follow, but of the widening gulf between trade and profession.

To deal with the more open question of advertising as a body, first, I would ask you to consider what is the chief function of the architect. Is it to act as policeman over a dishonest builder, or is it to bring art into the daily life of the community? With no high and mighty airs at all, I venture to suggest that the latter is his chief function, and that without that purpose, building would get along very nicely without the architect at all. The general public does, in fact, imagine that it is getting on very nicely without the architect simply because it does not want art in its life so far as it knows. If it were possible to show them that it is necessary to have art in their lives, by means of advertisement, then there would indeed be an excellent case for advocating corporate advertisement. But how on earth is it to be done? Do we not stand a much better chance of convincing them by disinterested propaganda than by entering into competition with the "Block and Blank Construction Company," who provide a perspective sketch, plans of the house, building the house, and conveying the property all in one bite?

The question of whether the individual architect should advertise is to my mind still more obvious. Art is not a commodity, and the artist does not profess to sell it at a profit, but merely to administer it, claiming in return a living. Of all critics of an artist's work, the worst and least competent is in almost all cases the artist himself. This is surely well known as a fact, and if so, what earthly good will it be for an architect to invite the public to deal with him because he is the best man available? He might gather in as many fools into his practice as are captured by the ingenious patent medicine advertisement, but that is all. Really, the only thing he would be able to say that would attract the public would be that he would undertake work at cheaper rates than his fellows. I imagine that this sort of thing is not in the minds of those who advocate advertising.

You have said very truly that the best advertisement that an architect can have is a satisfied client. I agree entirely, and am equally convinced that however many hoardings are covered with choice perspectives, the architect's practice will continue to grow mainly through this source. And this is, after all, a dignified state of affairs, which is part and parcel of professional life. Let us be very careful before we disturb it.

POSITIVE.

Edward II. Tomb Effigy in Gloucester Cathedral (1300).

(*See page* 928.)

ILLUSTRATIONS

PLATES

New Flats, Maida Vale.

A block of flats specially designed to admit full daylight to every room is about to be built in Maida-vale. The angular system of layout which has been adopted may be studied from the plans given in this issue. The block, which will stand 50 ft. back from the roadway, will be 400 ft. long, and the site is only 70 ft. deep. The new flats will face west, and the back windows will receive the morning sun and the front ones the sunshine of afternoon. In front of them will be gardens and at the back a private road serving the tradesmen's entrances and leading to garages. The main achievement is the avoidance of the internal "well" around which many windows of the average block of flats are grouped. The builders are Messrs. John Knox and Dyke.

Sir Giles Gilbert Scott, R.A., F.R.I.B.A., is the architect.

Warehouse and Offices, Goswell-road.

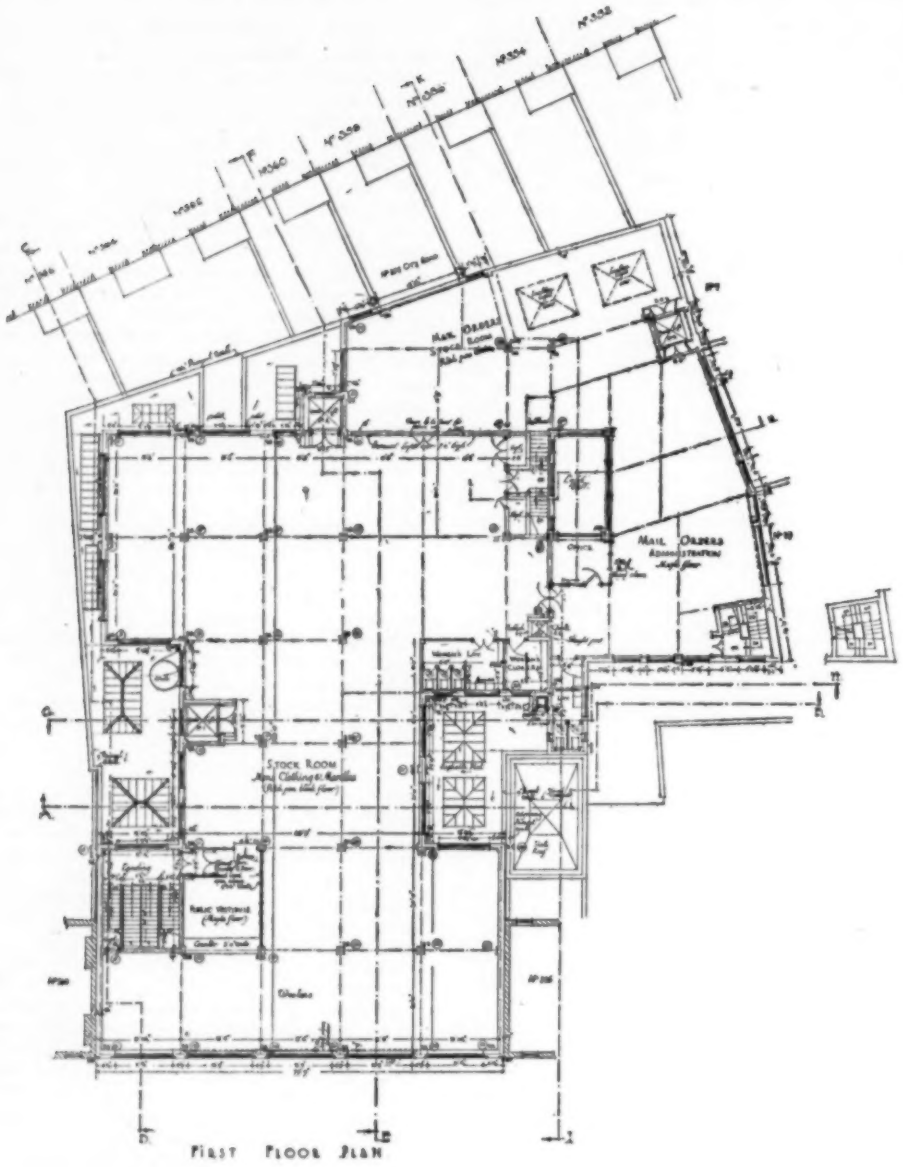
This building is to occupy a site—which in the main has been long vacant—on the east side of Goswell-road. It has been designed to meet the growing needs of a firm whose business (conducted on the instalment payment system) has during recent years developed beyond the capacity of their existing accommodation. While retaining their shop and show-rooms in City-road, it is intended to remove to the new site all stocks, administration, and the like. The levels of the site made easy the formation of a lower ground floor below Goswell-road, approached by vehicles from Sidney-grove on the same level. This floor will be used for "dispatch and returns" for "mail orders," and for various stores and heating chamber. Two large lifts and a parcels chute will transport goods from the upper floors. To ensure satisfactory acoustics, special materials will be applied to the ceiling and walls of the top floor, it being essential that the voice should carry without undue effort to the extreme length of this room. The building will be steel-framed, and of fire-resisting construction throughout. Owing to the nature of the soil the stanchion foundations in some cases have been taken down to a depth of 26 ft. below the surface. The façade to Goswell-road will be faced with Doulton's Carrara ware, and the windows will be Crittall's metal warehouse type, having enriched panels between the heads and sills of windows on the various floors.

The general contractor is Mr. Horace V. Clogg, and the sub-contractors, so far as at present determined, are:—Trussed Concrete Steel Co., Ltd., floors, flats and stairs; May Construction Co., acoustics; A. Sauvee & Co., Ltd., steel rubbish and parcels chutes; E. Hughes & Co., book and tray racks; International Time Recording Co., Ltd., card recorders; H. Young & Co., Ltd., steelwork; Wolverhampton Corrugated Iron Co., Ltd., roof covering; Carter & Co., Ltd., dadoes; Medways Safety Lift Co., Ltd., lifts.

Mr. Herbert A. Welch, F.R.I.B.A., is the architect.

The Regal Cinema.

This new cinema provides seating accommodation in stalls and circle for 2,400 persons, though as a whole it is licensed by the L.C.C. for 3,500. The design of the auditorium is based on a conception of a Roman temple, with glades and garlands of creeper as the decorative motif. There are no pendant lighting units in the auditorium, the lighting of which is concealed at the source and produces the illusion of out-of-doors. One ingenious detail of engineering equipment is a lifting apparatus which will raise the orchestra and the organ console to stage level, either together or independently. The theatre is well planned, entrances, exits and circulation being adequately provided for. Decoration, seating and carpeting are all of a luxurious character. A restaurant provides



Warehouse and Offices, Goswell Road, E.C.

MR. HERBERT A. WELCH, F.R.I.B.A., Architect.

accommodation for 200 persons, and includes a dance floor. The exterior is carried out in Portland stone.

The general contractors were Messrs. F. G. Minter, Ltd., and the following were sub-contractors :—Smith, Walker, Ltd., steel-work; Caxton Floors, Ltd., fireproof floors; Leeds Fireclay Co., Ltd., sanitary fittings; B. Cohen and Sons, Ltd., fibrous plaster work and decorations; Campbell Bros., Ltd., fibrous plaster work and decorations; H. H. Martyn and Co., Ltd., fibrous plaster work and decorations; Fairfield productions supplied by Fairfield Paint Co., used on first floor lounge; Marb-l-cote, Ltd., Marb-l-cote decorations; the Crittall Manufacturing Co., Ltd., metal windows; Frank Burkitt, lantern lights and scenery counterweighting gear; Anselm Odling and Sons, Ltd., marble work; Comyn, Ching and Co., Ltd., cast-iron canopies; the Safety Tread Syndicate, Ltd., iron staircases; Carter and Aynsley, and London Metal Warehouses, Ltd., ironmongery; Carter and Co., Ltd., wall and floor tiling; J. M. Pirie and Co., Ltd., entrance doors; the Berkeley Electrical Engineering Co., Ltd., electrical installation; W. Hill and Son, and Norman and Beard, Ltd., organ; Z. D. Berry and Sons, heating and ventilation; the Express Lift Co., lifts; the Sturtevant Engineering Co., Ltd., vacuum cleaning plant; Merryweather and Sons, Ltd., fireproof curtain and sprinklers; Gillett and Johnston, carillon of bells; J. Starkie Gardner, Ltd., wrought-iron railings, grilles, etc.; Ragusa Asphalte Paving Co., Ltd., asphalt; Malcolm Macleod and Co., Ltd., concrete steppings; Tappin and Co., plastering. Materials were supplied by :—London Brick Co. and Forders, Ltd., and Eastwoods, Ltd., bricks; Shaw's Glazed Brick Co., Ltd., white glazed bricks; the Cement Marketing Co., Ltd., cement.

Mr. Clifford Aish, F.S.I., is the architect, with whom Mr. C. Muggeridge was associated as decorative adviser.

British Institution Scholarship in Architecture.

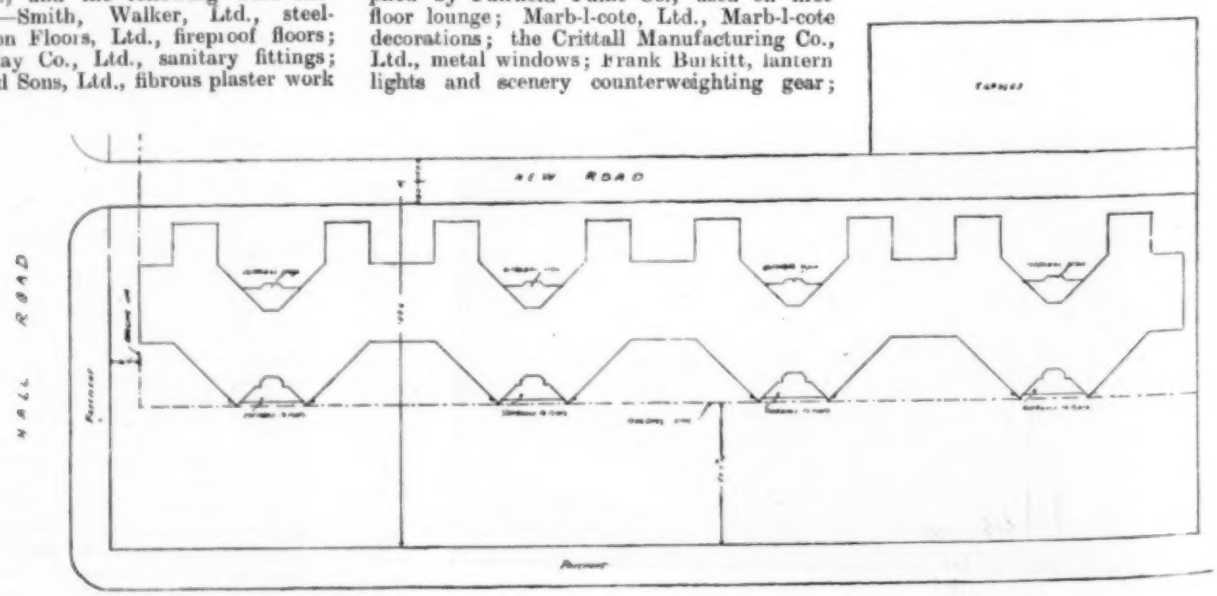
One of the subjects for this year's British Institution Scholarship in Architecture was "A Cloister Enclosing a Laid-out Garden, with an Ornamental Well Head in the Centre." The successful competitor was Mr. Arthur L. Hall, a student of the Polytechnic School of Architecture, whose design we illustrate this week.

Chapel in Orford Castle.

In connection with Orford Castle, Mr. Arthur Welford, A.R.I.B.A., writes :—"I think you will be interested in the sketches of the chapel in Orford Castle, as you published a photo of the keep in last week's *Builder*. The chapel, when I made the sketches in 1906, was not floored or roofed, but this has since been done. It is a very interesting chapel, on a very small scale; in fact the whole of the keep is most interesting. At present it is three stories high, having a store with a well in the basement, a guard room on the entrance floor, and a fine living room on the first floor. The towers are not accessible, except the staircase tower, which can be ascended to the top. There is a kitchen with fireplace and a stone sink which discharges by a gargoyle into the fosse.

"The keep is built of a local red crag-stone with Caen dressings."

(Mr. Welford's sketches appear on p. 940.)



Block Plan of Proposed Flats, Maida Vale.

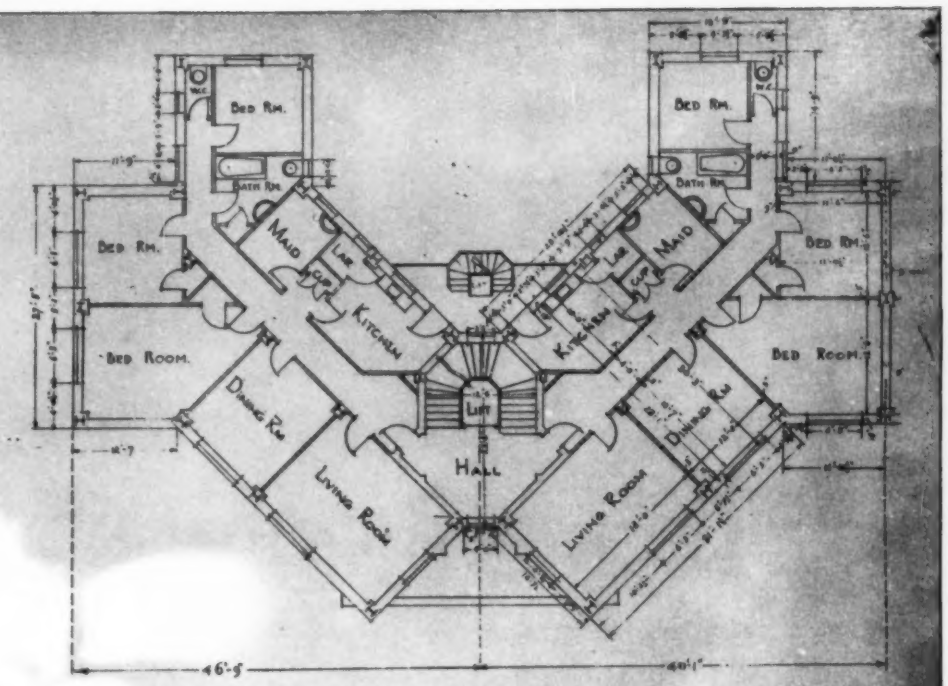
SIR GILES GILBERT SCOTT, R.A., F.R.I.B.A., Architect.

The Regal Cinema, Marble Arch, W.: Circle Lounge.
Mr. Clifford Aish, F.S.I., Architect.

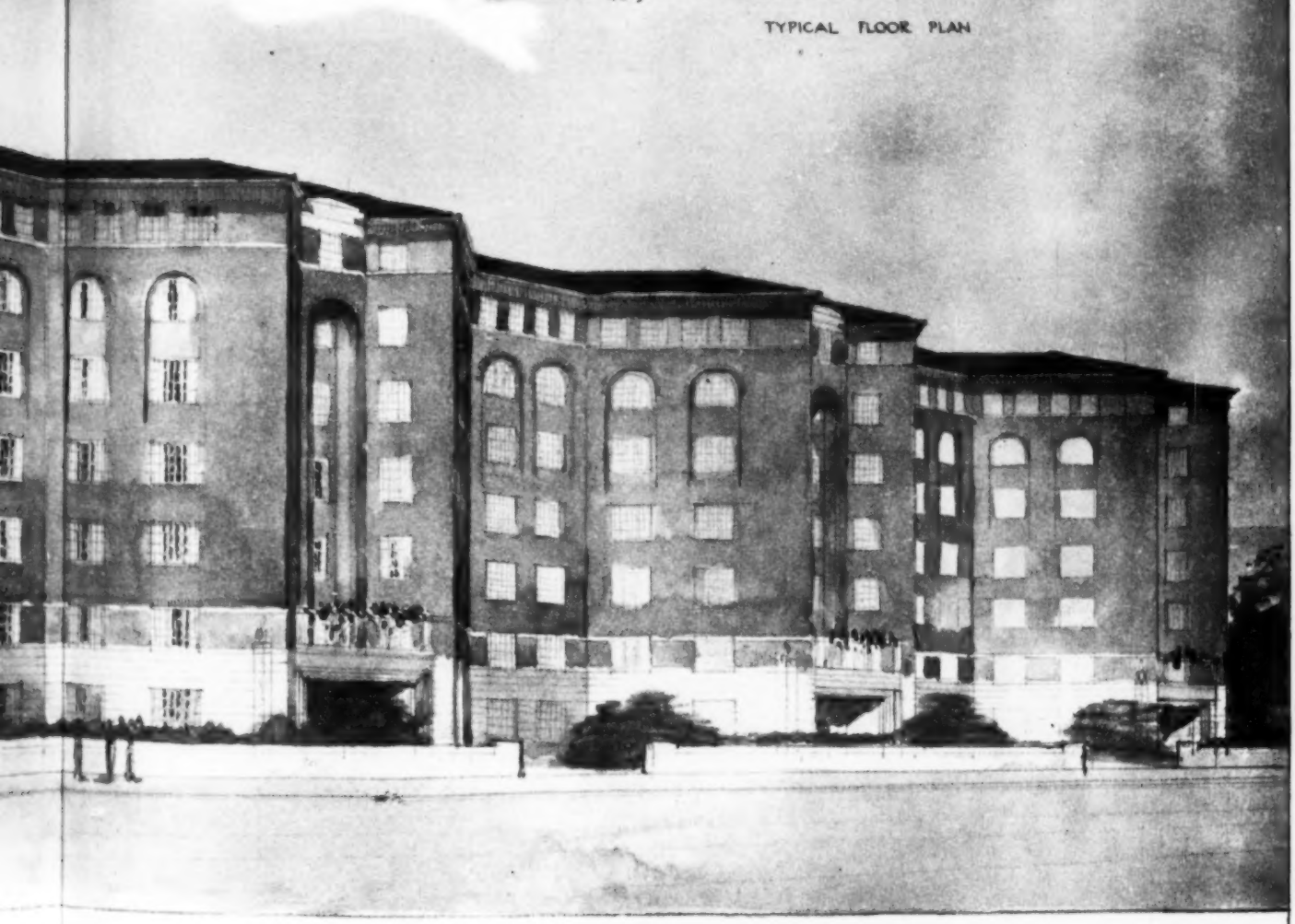
Mr. Clifford Aish, F.S.I., Architect.

Proposed Flats Maida Vale.

Sir Giles Gilbert Scott, R.A., F.R.I.B.A.

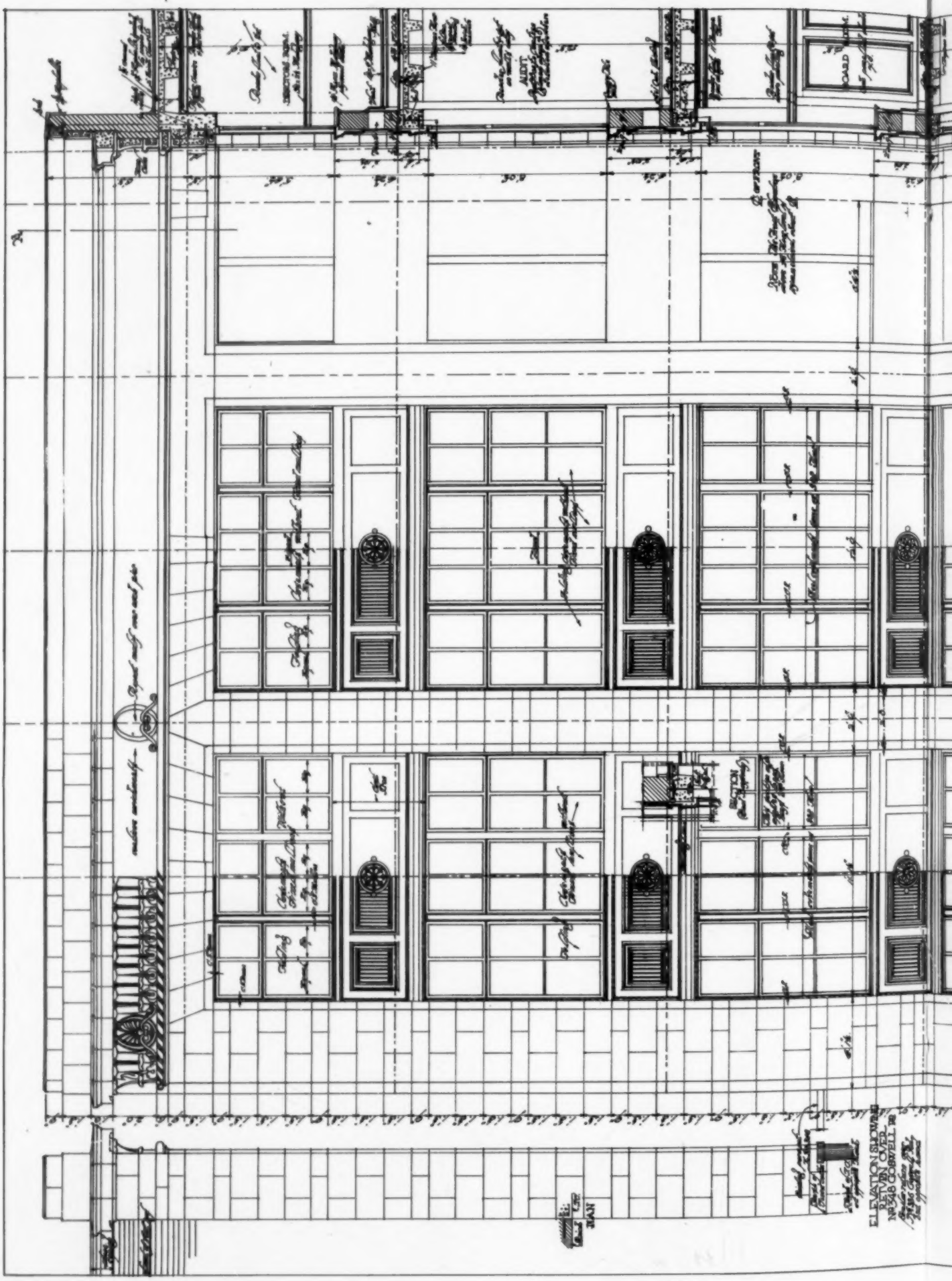


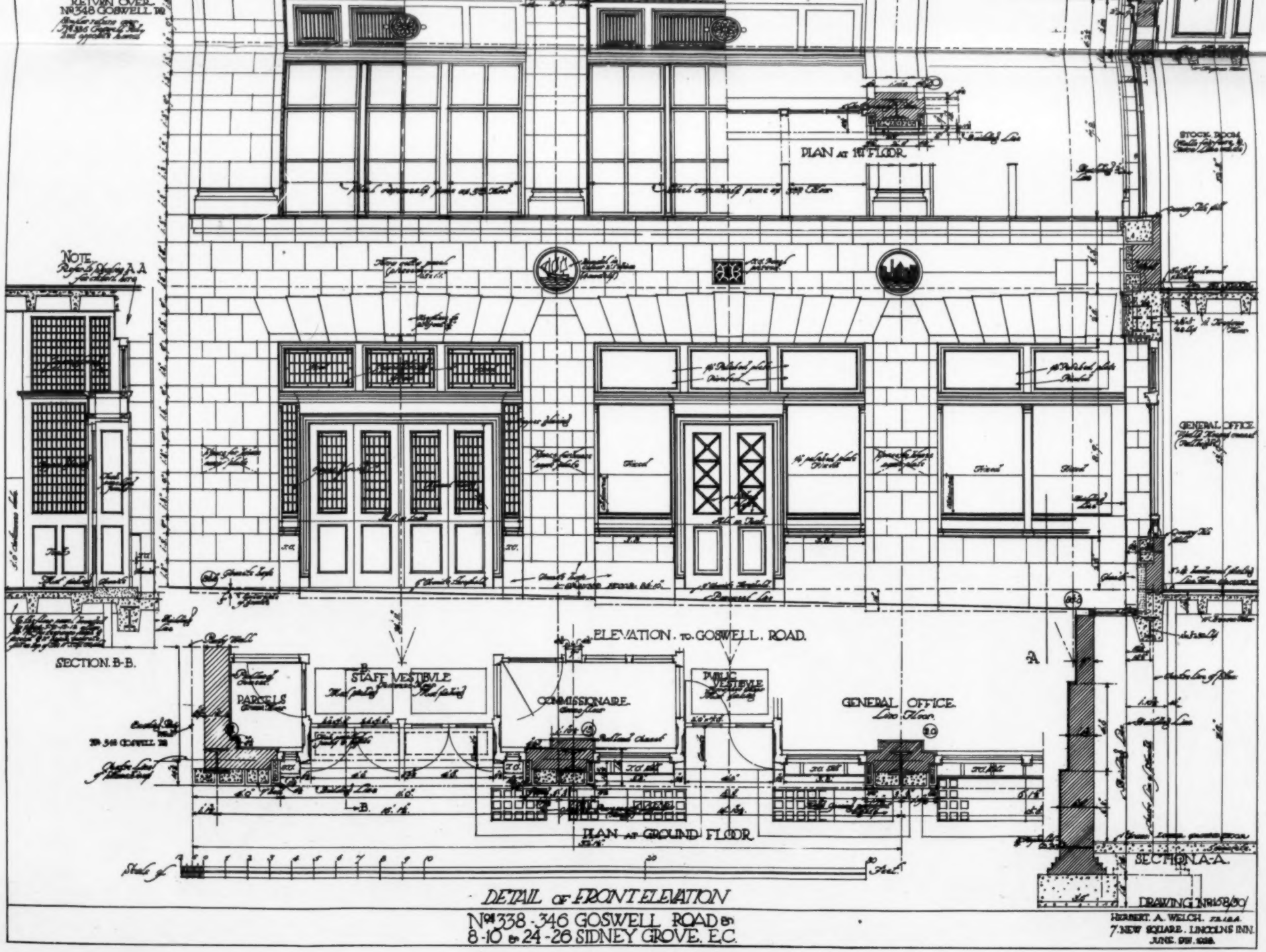
TYPICAL FLOOR PLAN



Perspective Sketch.

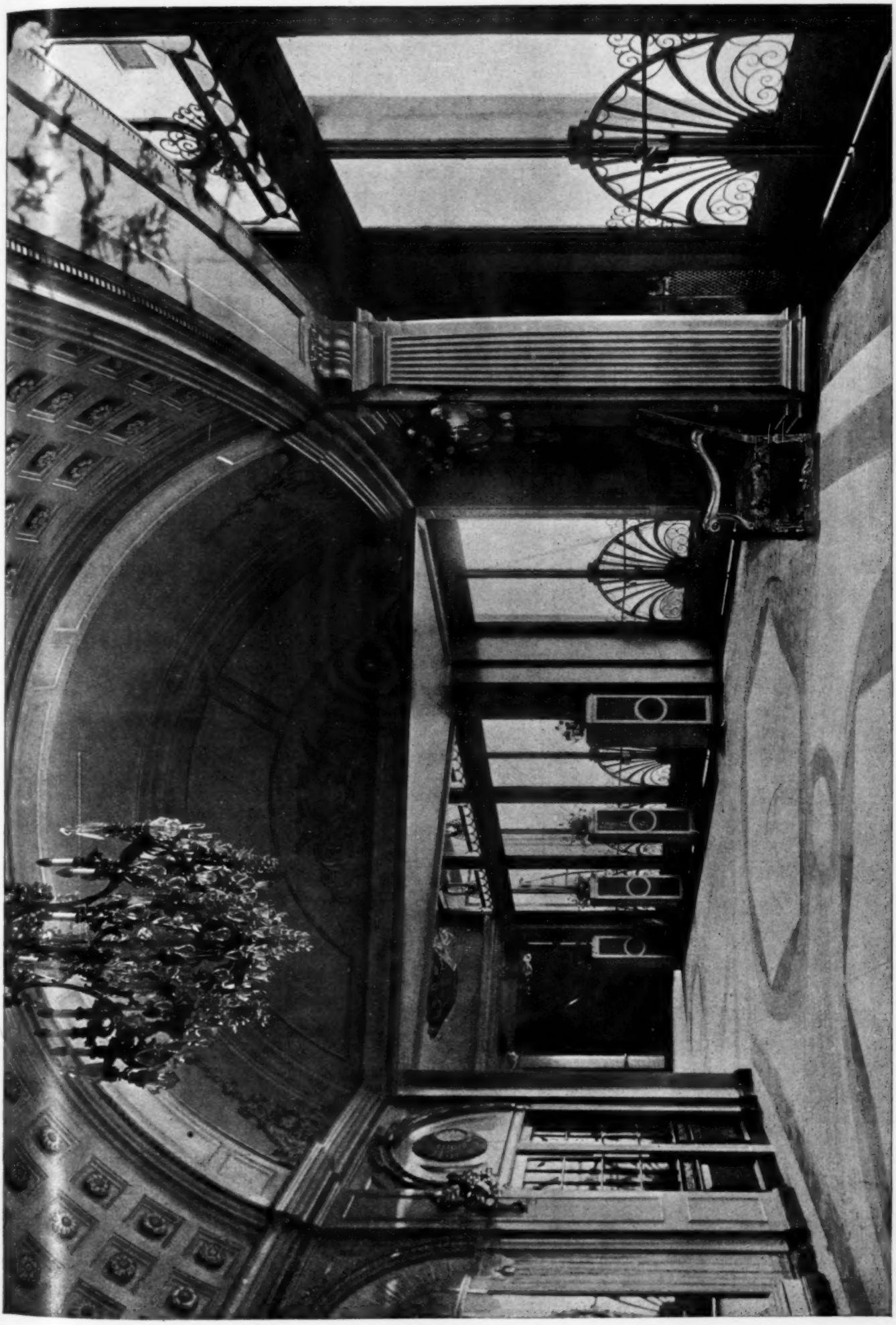
, R.A., F.R.I.B.A., Architect.


ELEVATION TO NEW BROADWELL



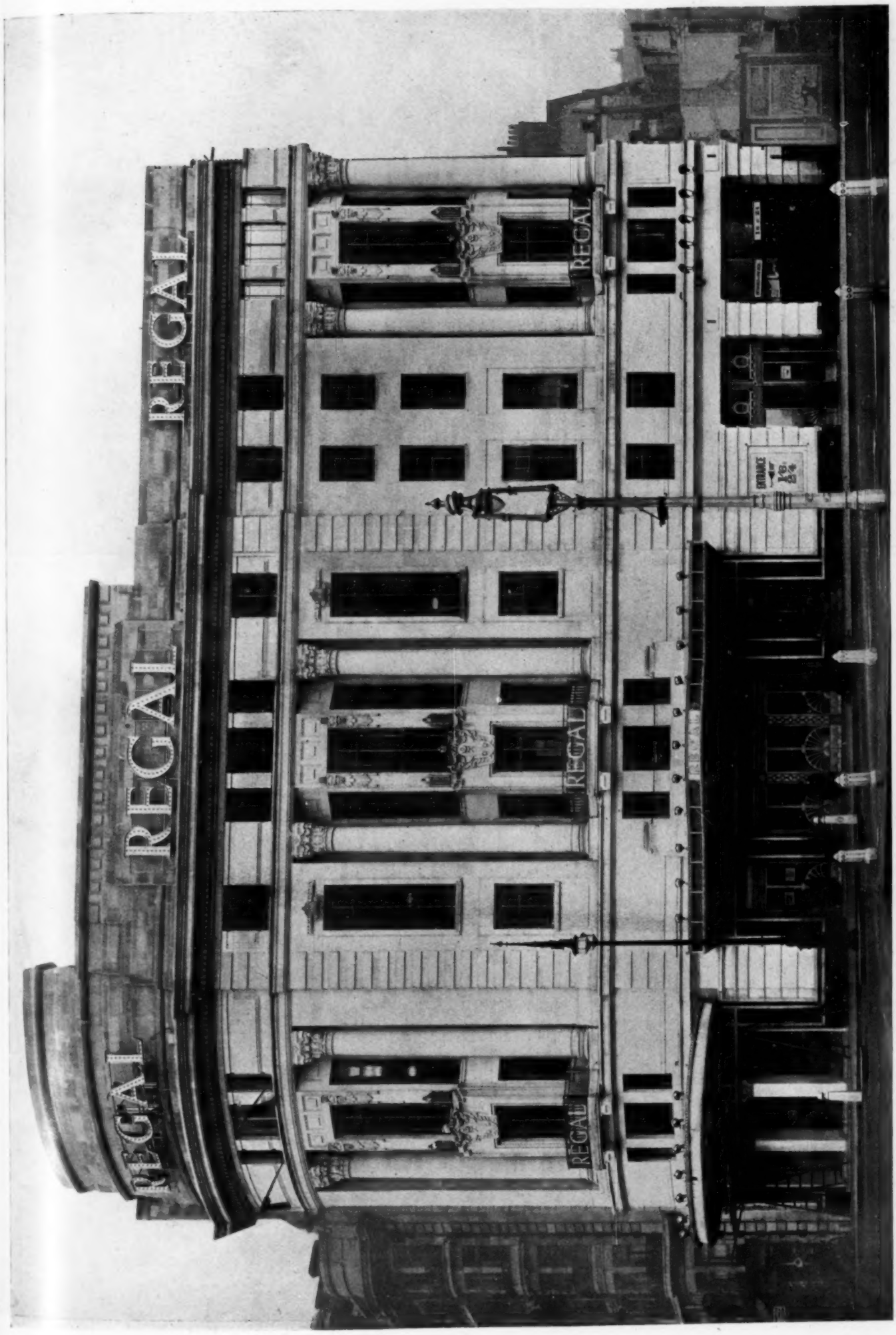
WAREHOUSE AND OFFICES, GOSWELL ROAD, E.C.

Mr. Herbert A. Welch, F.R.I.B.A., Architect.



The Regal Cinema, Marble Arch, W.: Entrance Vestibule.

Mr. Clifford Aish, F.S.I., Architect.



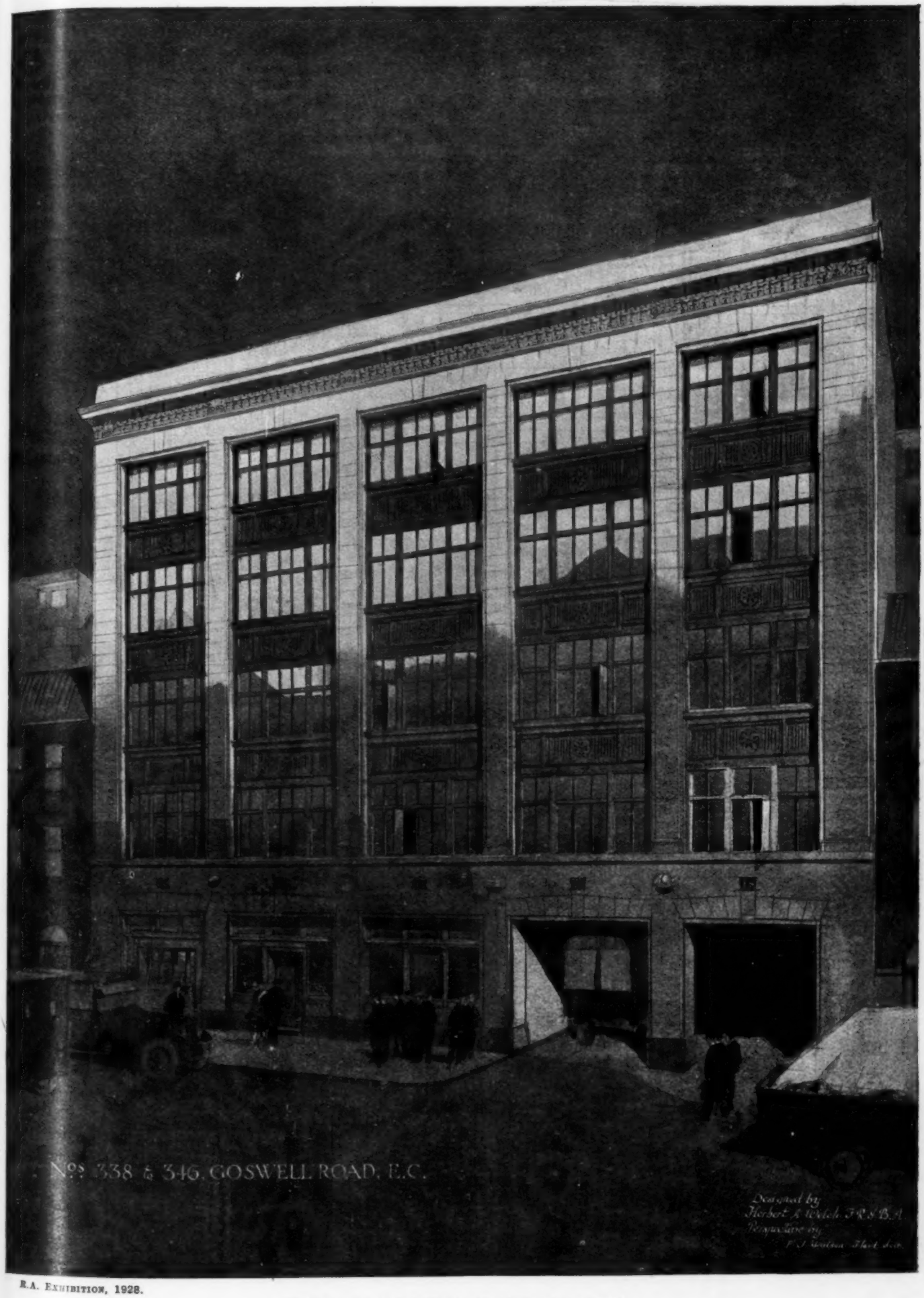
The Regal Cinema, Marble Arch, W.
MR. CLIFFORD AISH, F.S.I., Architect.

VIEW OF PROSCENIUM FROM CIRCLE.

AUDITORIUM FROM CIRCLE.

The Regal Cinema, Marble Arch, W.

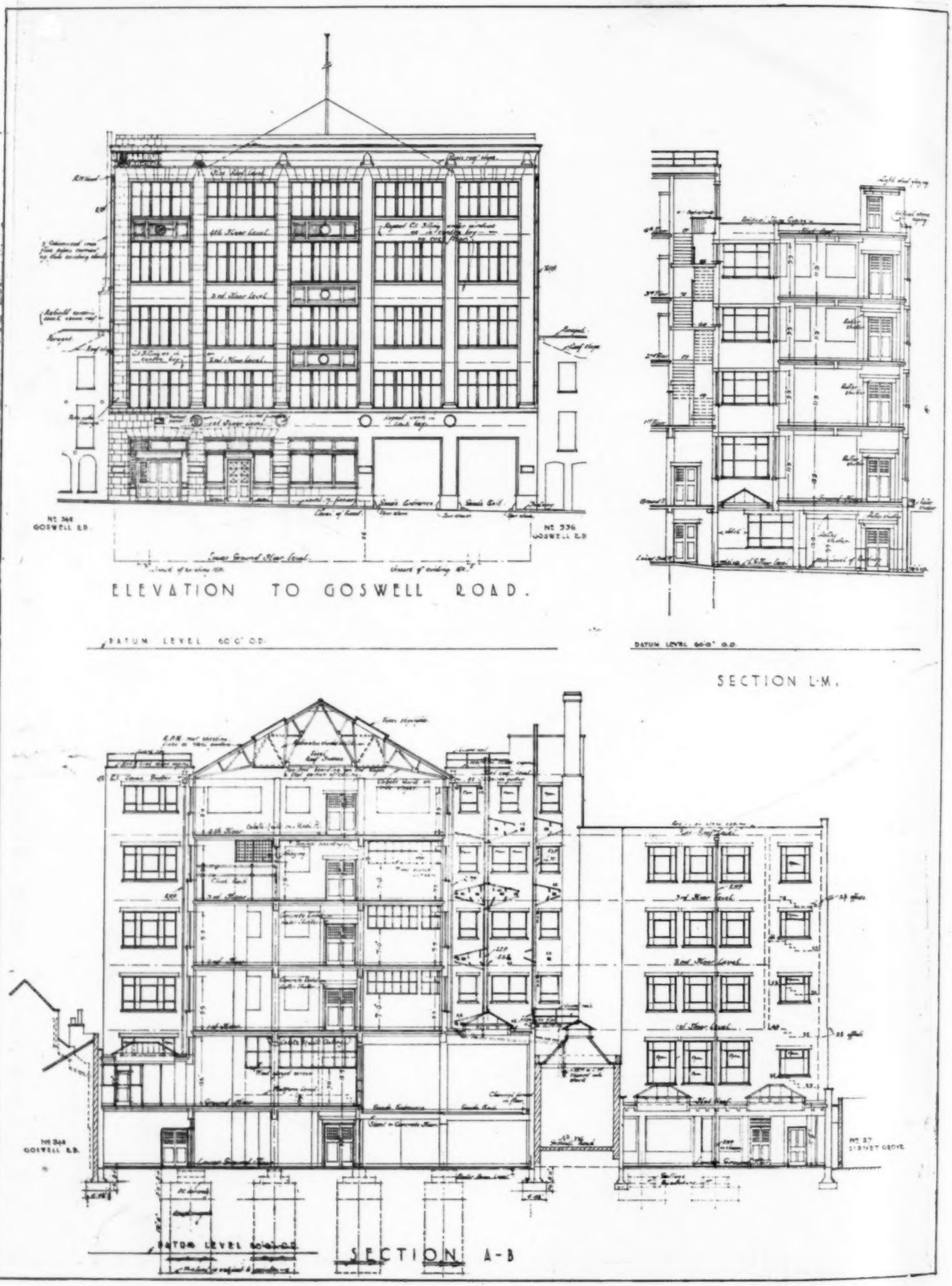
MR. CLIFFORD AISH, F.S.I., Architect.



R.A. EXHIBITION, 1928.

Warehouse and Offices, Goswell Road, E.C.

MR. HERBERT A. WELCH, F.R.I.B.A., Architect.



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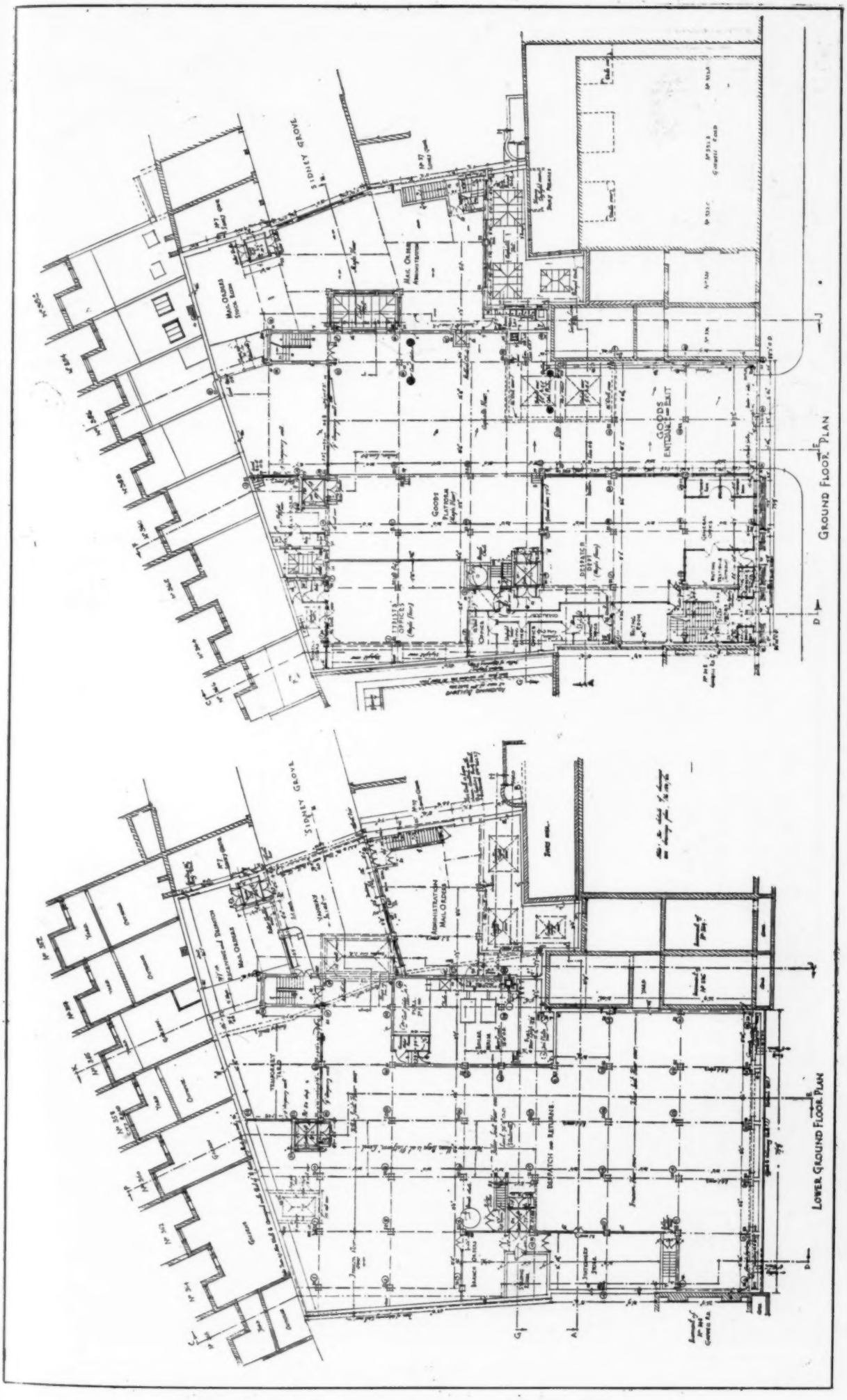
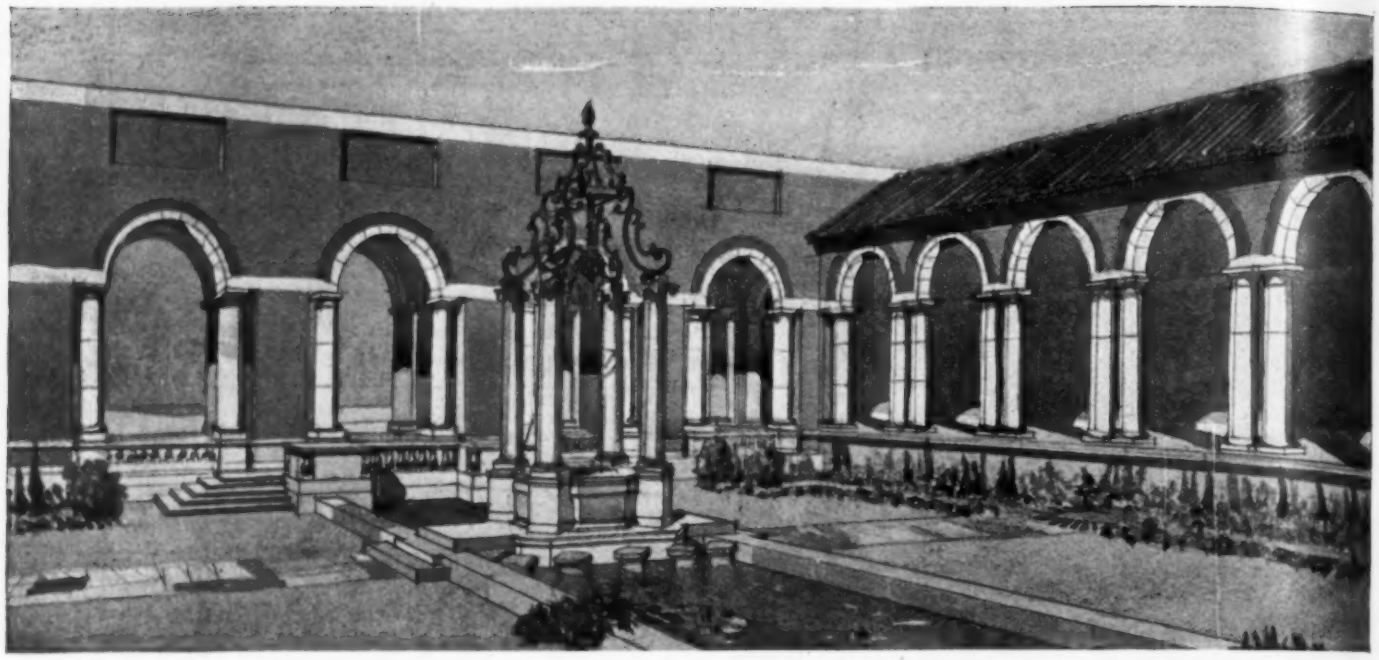
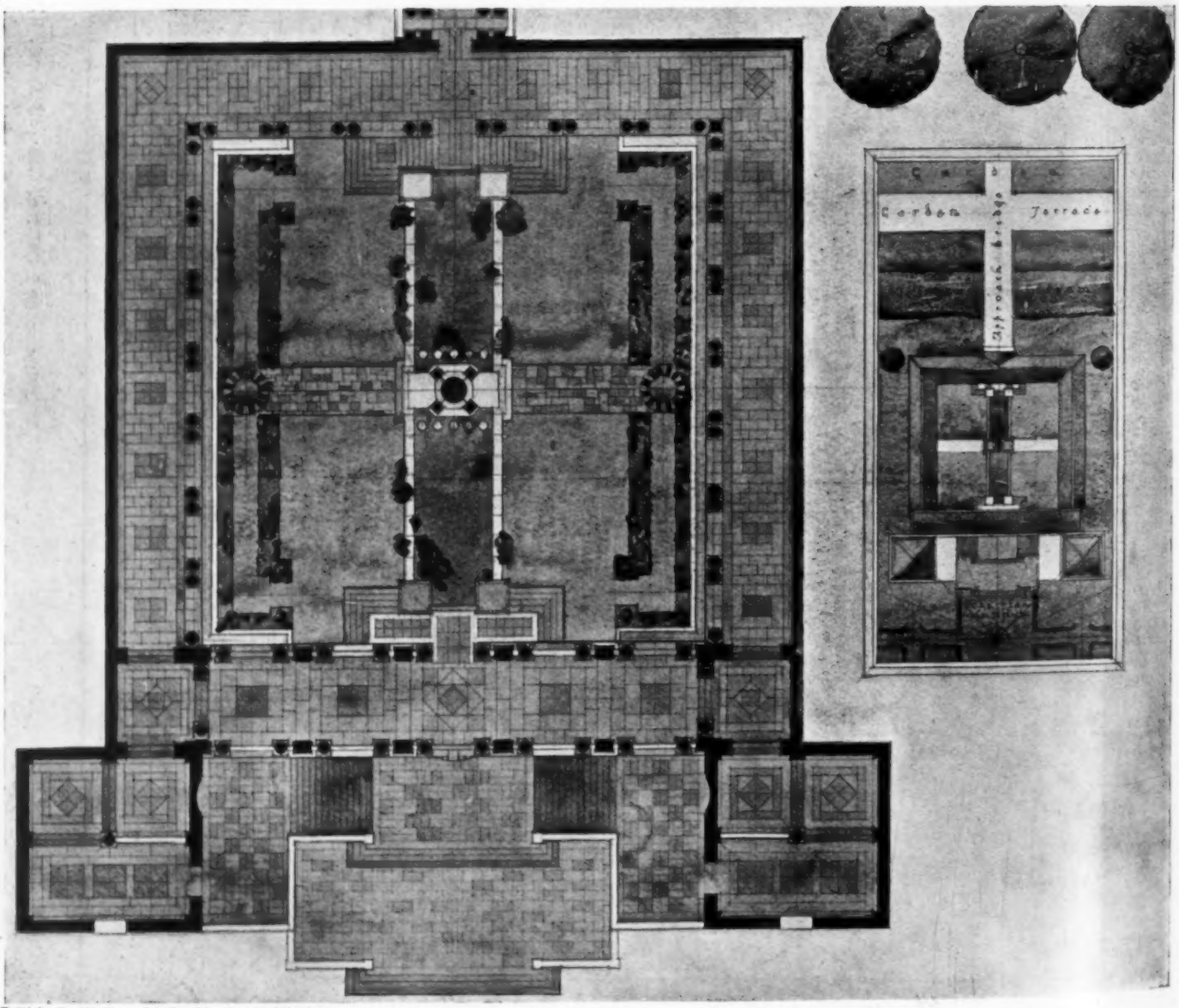


Warehouse and Offices, Goswell Road, E.C.

MR. HERBERT A. WELCH, F.R.I.B.A., Architect.



Perspective View of Interior.

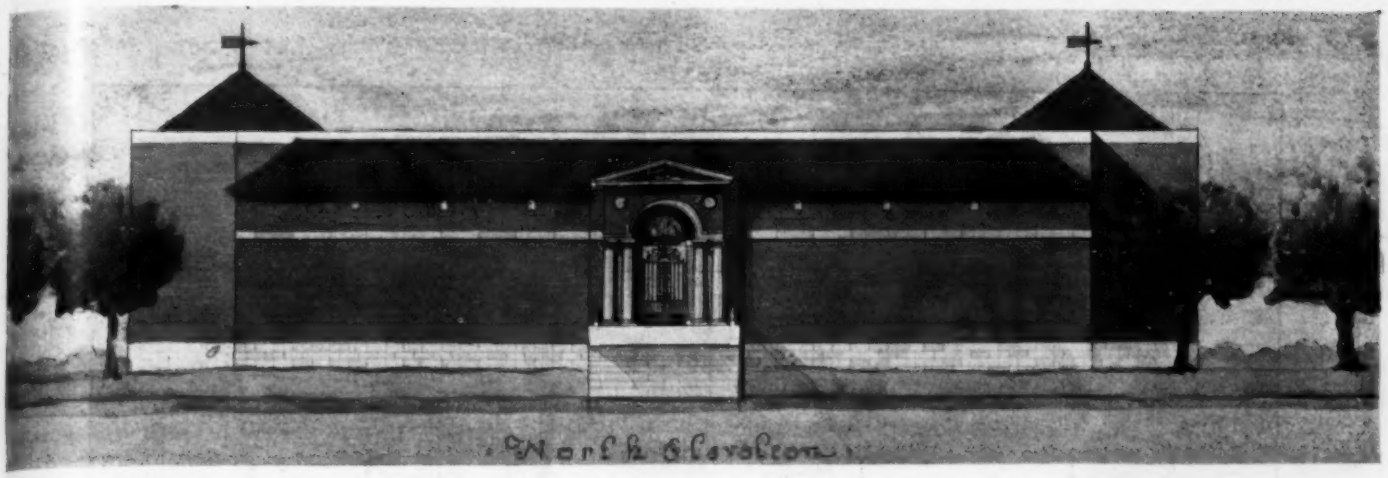


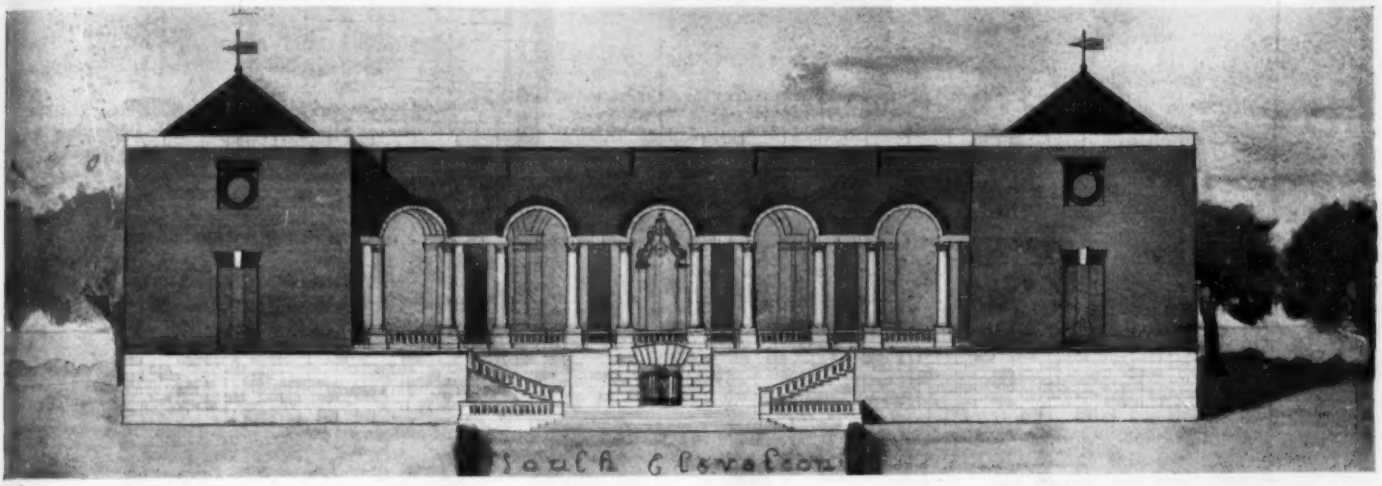
British Institution Scholarship in Architecture.

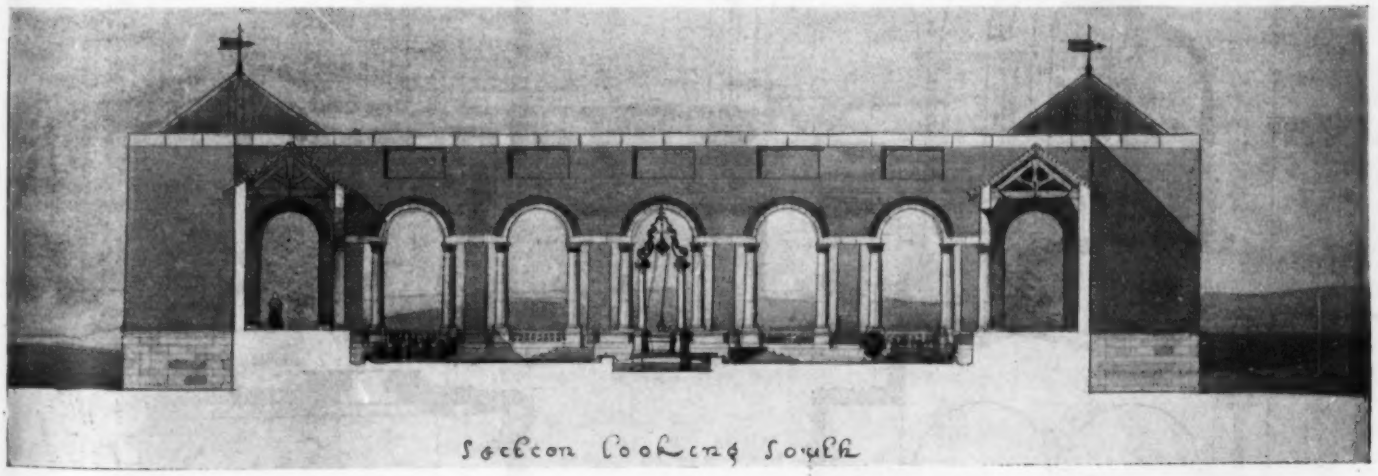
Plans

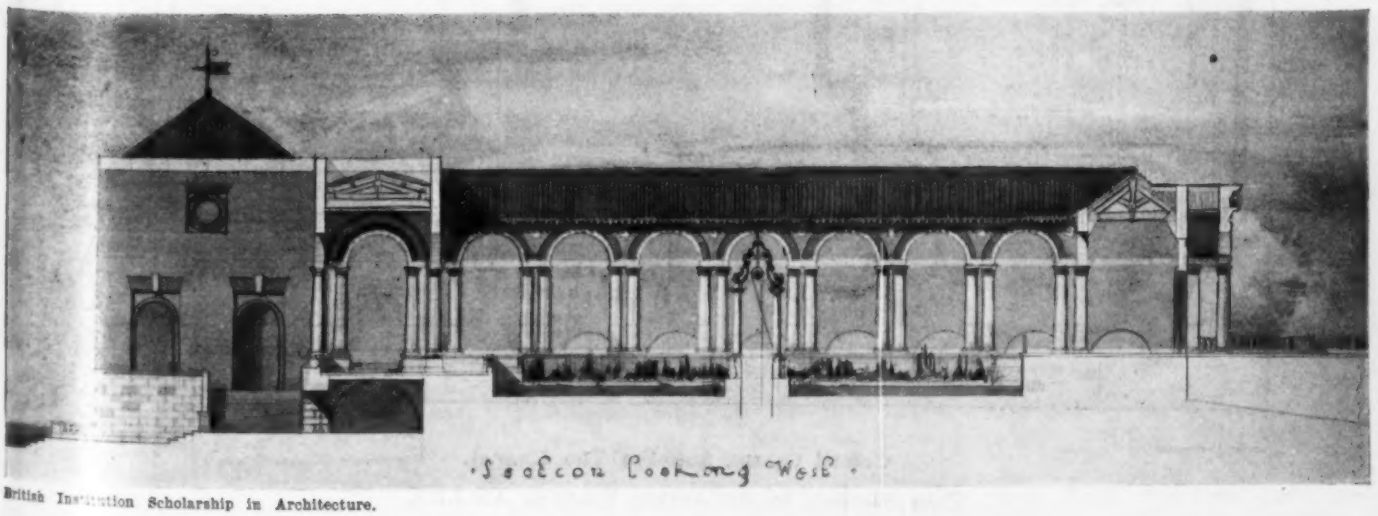
"A Cloister enclosing a Laid-out Garden": Winning Design.

By Mr. Arthur L. Hall (Polytechnic School of Architecture).









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"A Cloister enclosing a Laid-out Garden": Winning Design.

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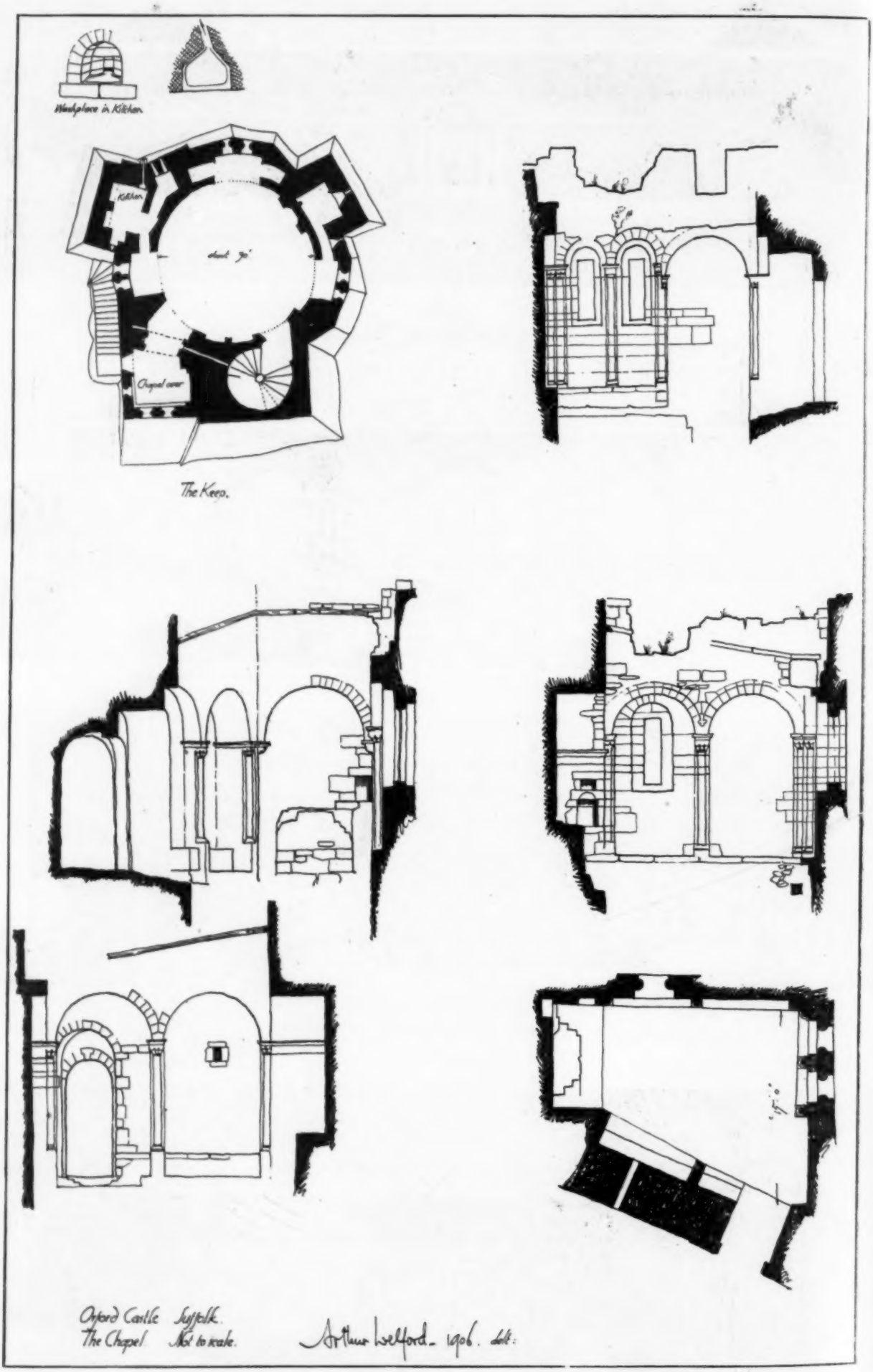


Orford Castle, Suffolk: The Chapel.

From Sketches by MR. ARTHUR WELFORD, A.R.I.B.A.

ARCHITECTURE, NATURE AND MAGIC—XI
ORNAMENT AND STYLE

By W. R. LETHABY.

MAGIC ORNAMENT.

For the most part we have been concerned with the larger facts of meaning in building structures. Now, nearing the end, we may consider the purpose of what we call "ornament," "pattern," and "decoration." (How are these words explained in the tracing-paper theories of "architecture," I wonder?) Generally it may be said that ornamentation was a sort of tattooing wrought on objects to protect them from evil spirits and the evil eye.

Imitations of prototypes in nature were not only structural, but they are equally found in what we call ornament. Representations of the world mountain, the starry sky, the waters, the polar tree, the sun disc, guardian creatures, etc., on a small scale were consecrating and protective symbols. Such amulets, "charms," as we call them, formed the substance of decoration and pattern. This fact opens out an immense field for exploration, but I can only touch on one or two examples.

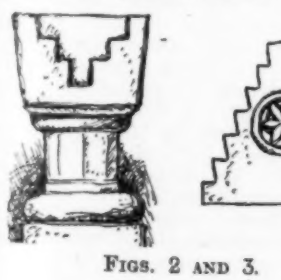
The stepped triangle, the form of the great *Ziggurats*, was repeated in Babylonian art in many ways down to a minute scale. Before considering them I wish to refer back to the stepped monuments.

In my former study of this subject I gave a restoration of the Tower of Babel set out from dimensions Mr. George Smith found on a tablet which he deciphered. The bottom stage was of great height, and the second about half as high; then followed four of moderate height, and the seventh, the sanctuary, was tall again; the whole elevation was equal to the base. The great height of the bottom stage had a counterpart in the Ziggurat of Ur as established by the recent excavations. Here the high bottom stage was ascended by long staircase ramps, and this was doubtless the case at Babel also. This would agree with the account of Herodotus that when one was about half-way up there were seats where people might rest on their way to the summit. My drawing of the Tower of Babel is repeated in Fig. 1. Another was recently given by E. Unger (*Assyrian and*

FIG. 1.

Babylonian Art, 1927). The main scheme is exactly like Fig. 1. The bottom stage is ascended by long flights of steps as at Ur, while the four low upper stages were inclined ramps. We know that at least in one other case that the height of a *Ziggurat* was the same as its width, and this was probably a general rule.

In the ornamental applications of the form only the general notion of a stepped triangle was taken. In Fig. 2 we have the mountain steps forming the "horns" of a model of an altar. Much evidence, as I have before mentioned, leads to the conclusion that an altar represented the earth and its horns the four corners, but I do not know if this view has anywhere been suggested. Fig. 3 is part of the cresting of a parapet or other part of a building.



FIGS. 2 AND 3.

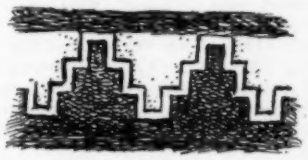
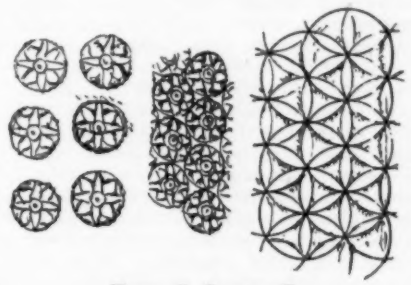


FIG. 4.

Fig. 4 is from a fragment of pottery recently brought from Nineveh. All these are in the British Museum. Dozens of other examples might be collected; doubtless the meaning of the charm was strength; we may call it the battlement ornament.

Figs. 5 and 6 are from star-spangled garments carved on the Assyrian slabs.



FIGS. 5, 6, AND 7.

The definite "pattern," Fig. 7, from a floor must, I think, have been developed from such designs; compare Fig. 3.

In Egypt, the units of which decoration was composed were a great number of amulets, which had well-defined powers. The use of these "probably dates from predynastic times . . . the power of amulets was thought to be irresistible." A few of those in the large collection at the British Museum may be specially mentioned.

Buckle and the Girdle of Isis, "believed to protect the wearer from every kind of evil." *The Tet Pillar*, "this object symbolises the world tree; it was worn as a symbol of stability." *The Papyrus Sceptre*, "a symbol of health, and was intended to give youth, vigour and power." *Two Plumes* "symbolised the power and height of heaven and the great gods of light and air." *The Eye of Horus* "was intended to bring strength, protection, safety, etc. When two eyes are together they typify the sun and moon." *Two Fingers*, "which Horus stretched out to help his father up the *Ladder*, which led from earth to heaven." *The Sun's Disc* "symbolises new birth, resurrection," etc. *The Angle*, "rectitude." *The Plummet*, "moral integrity." These two last would make admirable "charms," as we call them, for an architect! Besides these may be mentioned the *Ankh* sign of life, and the *Lotus Flower*.

The application of these and other symbols in Egyptian art would fill a volume. Here I will only touch on the Eye and the Lotus motives as they are found also in other schools of art. Pairs of Eyes are often represented on Egyptian coffins. In the British Museum we have such objects as: "Pairs of bronze and ivory eyes for inlaying in coffins. . . . Marble eye for inlaying. . . . Eyes for inlaying in coffins with bronze and blue glass eyelids. They brought protection to the deceased and his sarcophagus." One of the gateways in the underworld is represented in the Book of the Dead as having two great staring eyes above it.

In the recent exhibition of antiquities, dating from about 3,000 B.C., found at Ur, there have been three or four which had patterns of eyes, either in chains or all

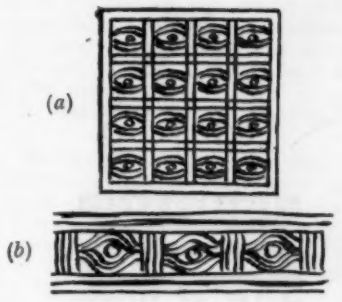


FIG. 8.

over. Fig. 8 *a* is from a gaming board; *b* from a piece of harness.) The custom of protection by eyes was maintained in Greece, and great eyes were painted on the prows of a ship. Drinking cups were also frequently painted with pairs of staring eyes. They are so grotesque that they must have had a most efficient magical effect. In the British Museum are dozens of examples, and some of the cups are further protected by hideous grinning gorgon's heads. Great eyes regarding the four directions were sometimes represented on Buddhist monuments.

In Egypt the Lotus was sacred from an early time; it flourished on the Lily Lakes of the other world and was an obvious symbol of life and purity. Breasted, telling of a noble in his palace, says:—"Beauty surrounds him on every hand. Lotus blossoms are on the handle of his carved spoon, and the deep blue calyx of the same flower forms his wineglass. Limbs of the lion or ox carved in ivory support the chair on which he sits."

In Mesopotamia, the lotus was used in like ways, and also in Crete. "The lily and the iris were favourite flowers among the Minoans. It seems reasonable to suppose that both had a symbolic meaning, perhaps with as profound a significance as the lotus of Buddhism." (B. E. Williams, *Gournia*.)

Lotus patterns appear in great profusion on early Greek pottery (Fig. 9), and in temple

FIG. 9.

decorations; without doubt they had protective virtues. The carved moulding which we elegantly call "egg and tongue," and repeat without meaning by hundreds of miles, was a lotus pattern and was of good omen. The use in symbolism of the lotus in Buddhist art and in India and China generally, is too vast a subject to enter on. To anyone who feels equal to it, I would recommend Goodyear's *Grammar of the Lotus* as a beginning. Fig. 10 is from one of a group of early tombs in Weihaiwei, in China, which are said to be of the third century B.C. The central dome-like part rises from a great lotus member, very similar to a reversed egg and tongue moulding. Of the flower itself, Mr. Havell says:—"The shining lotus flowers, their manifold petals opening at break of day and closing at sunset, the root hidden in the mud, seemed perfect symbols of creation, divine purity and beauty, of the cosmos evolved from the dark chaos. The lotus was the seat of the gods, the symbol of the universe. The open

lotus flower is used as a sun emblem." (*Indian Architecture.*)

Other building amulets, which were widely distributed, were the sun disc and the palm-tree. In Fig. 11 I give sketches of the winged sun from a Hittite sculpture, and of two examples of a character, which

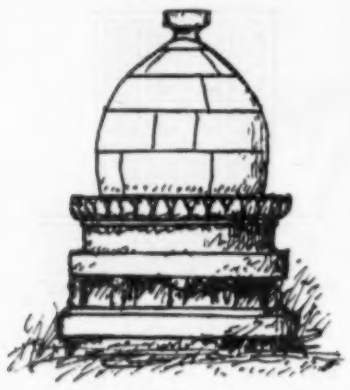


FIG. 10.

frequently occurs in Hittite inscriptions, and can hardly be any other than simplified versions of the same. These are so like a remarkable motive in Minoan art, sometimes called the half rosette and triglyph, that I think it and the Hittite symbols must be closely akin.

Early man's relation to art is well understood in the following passage from Worringer's *Form in Gothic*. "At every step he clings fast to religious protective measures and attempts by means of secret exorcisms to make himself and all that is dear to him taboo. . . . He employs symbols

FIG. 11.

by covering all his cherished belongings with these magic signs, and first and foremost seeks to make his person taboo by ornamental tattooing." And his buildings secure, we may add, by architectural tattooing.

Nature and Style.

What we call "style" and "design" in works of ancient art were the resultants of many factors such as structural law, local materials, common needs, as well as ritual and magic. Besides these open, ever-present, influences, there was always a deep mental background, constituting the unconscious mind of a people. Further, there was the natural environment, and Nature in itself has had a dominating influence on building thought. The people of the plains of Babylon, seem to have retained traditions of their ancient mountain homes in the highlands of the north-west, and to have built their Ziggurats in imitation of those natural "high places." The sky and moving stars also occupied their thought in a special manner

In Egypt the burst of vegetation after the inundation of the Nile, deeply impressed itself in the folk mind. The extent to which early Egyptian architecture was naturalistic has hardly been understood, except by specialists. Only a few months ago Mr. Cecil Firth reported his discovery at Sakkara, of the temple of Zoser, probably the first king of the Third dynasty, with a fine colonnade of "48 columns, which were three feet in diameter, of white limestone, carved to imitate bundles of reeds." Other early forms of Egyptian columns were imitations of palm trees, papyrus stems and flowers, and buds of the lotus plant.

"The Egyptians were passionately fond of flowers, although the flora of Egypt is not a rich one. The lotus was employed in many different uses. On feast days the Egyptians hung garlands of it from the walls, they tied it on to the cornices of kiosks and canopies, wound it round vases, and made collars and crowns of it. Decorative art here had but to copy habitual forms to produce fixed schemes of decoration in abundance. Jewellery long remained faithful to the forms which are offered by nature, as rich as they are simple."—(Capart.)

A very beautiful and early example of Egyptian naturalistic work is in the British Museum, numbered 1518. It is about three feet long and half as high, and represents water, birds and plants, and a rat-like creature. The forms are in relief of not more than 1/16 of an inch, and the whole is brightly coloured. The famous geese in the early tomb of the wife of Nefermat, at Meydum, are exquisite in their gay naturalness. A very good woodcut of these is given in Loftie's *Ride in Egypt*, 1879. Natural imitation was the essence of these paintings, for they were meant for the sustenance of the buried lady. There has been much talk about conventionalising nature in art, but closer study of antiquity is showing that ancient artists tried to be as natural as they might be, their works were a kind of living creations.

The following quotation is from Sir W. Flinders Petrie's account of the first four dynasties in Egypt—this great scholar, if I may say so, seems to be nearly alone in understanding the true dignity of art: "The essential feeling of all the earliest work is rivalry with nature. . . Man did not then regard his work as a piling together of stones, but as the erection of masses that rivalled those of nature. If a chamber was required, each side was formed of one single stone, as at Meydum. If a building was set up it was an artificial hill in which chambers were carved out after it was piled together. Thus a mere hollow was left, where the chamber should be, and then it was dressed down and sculptured as if it were in the heart of the living rock. The sculptor's work and the painter's show the same sentiment. They did not make a work of art to please the taste as such; but they rivalled nature as closely as possible. The form, the expression, the glittering transparent eye, the grave smile—all are copied as if to make an artificial man. . . . In each direction man then set himself to supplement, to imitate, to rival, or to exceed the works of nature. Art as the gratification of an artificial taste and standard was scarcely in existence; but the simplicity, the vastness, the perfection and the beauty of the earliest works place them on a different level to all works of art in later ages. They are unique in their splendid power, which no self-conscious civilisation has ever rivalled, or can hope to rival, and in their enduring greatness they may last till all the feeble works of man have perished."

In the remarkable art of Crete we observe keen interest in nature, the land and the sea—particularly the sea. Their wall and vase decorations represent dolphins, flying-fish, octopuses, shells, seaweed, waves, rocks, etc. Some of these decorations, as has well been remarked, suggest looking into an aquarium. A whole class of pottery is described as of the "marine style." This people was very keenly alive to the things of the sea. It has been said of the art of the Minoans in Crete, rather poetically, but suggestively: "The Cretan potter's first appreciation of nature was subjective; not distinguishing clearly between himself and the world in which he moved, his moods were in tune with winds and waves. He was full of wonder at the evidences of motion and growth; and he expressed his wonder throughout a long period of increasing self-consciousness. The line left on the sand by receding waves, the ripple on water as the wind scuds across it, the mysterious inner markings of a shell, the thousand varieties of spirals in shells and in tendrils, the shadows cast on his path by interlacing twigs, the stir of leaves and bending of branches, the flight of petals and seed-vessels, and the whirl which is the basis of so many forms of motion gathering many particles to one focus and scattering them forth again—these attracted him. The artist was awaking to nature; his aim, however, was not to imitate what he saw, but to record an impression."—(Howes, *Crete the Forerunner*).

Michaelis observed: "This art is suggested chiefly by the life of the sea. Seaweeds seem almost in motion by the action of the water; cuttlefish with extended tentacles, shellfish and other creatures of the Mediterranean are represented. Fantastic aquatic beings are not absent. We gain the impression of an art fresh in perception and in reproduction; the plants are conventionalised but very different from the stiff forms of the orientalised style." (*A Century of Discovery.*)

Among a bronze hoard of late Mycenæan character quite recently found under the door sill of a tomb in Argolis, several of the objects were "decorated with delicately engraved designs of flowers and shell fish." There were also "gold ornaments imitating shells."

The master interest of the Greeks in their maturity was with man and the higher animals. As Spengler says, their art was homocentric. The Parthenon frieze is *almost* as naturalistic as an instantaneous photograph of a procession.

In later Hellenistic art the representation of landscape and common incidents was developed. In China, too, landscape became a special motive; one may not have a porcelain cup or lacquer box without its bearing a landscape, and the buildings (as Spengler well observes) were themselves conceived as in landscape and a part of it. I have been told that in India, in some districts, where the rocks are stratified in broad bands of hard and soft, that the architecture of the district tends to echo the natural formation.

In Arabian architecture and ornamentation I seem to see a special interest in star forms, intersections, protractions, and the geometry of a star-gazing people.

The Gothic art of the Middle Ages was an outcome of the whole mind and feeling of the times. In a recent essay, I tried to show that it was inspired (unconsciously) by the forest life and forest psychology (*The Legacy of the Middle Ages*). I have been gratified to find in Spengler's big book, *The Decline of the West*, the following, which seems as if it might have been the source of all I tried to say: "The character of the cathedral is that of the forest, the transformation of columns into clustered piers that grow up out of the earth and spread on high into an infinite subdivision and interlacing of lines and branches; the giant windows by which the wall is dissolved and the interior filled with mysterious light—these are the architectural actualising of a world feeling that had found first of all its symbols in the high forests of the Northern plains. The endless lonely twilight wood became the secret of wistfulness in all Western building, so that when the form energy died down the controlled line language resolved itself into naturalistic branches, twigs, leaves . . . The history of organ building, one of the most moving chapters in our musical history, is a longing for the forest. The word *schwebend* is important alike in music, in painting, in architecture. . . . The forest solitude, the tempest and the surf." I must say again, that in holding this same view, I do not mean that there was any conscious imitation of trees and woods, but only that the buildings were produced by the same minds and hearts that produced the forest ballads. A true architecture is built out of the hearts of the builders. In Worringer's thoughtful work, *Form in Gothic*, he tries to disclose "the latent Gothic existing before true Gothic" in the minds of a people.

(*To be concluded.*)

THE ARCHITECTURAL ASSOCIATION

The Design and Building of the Small House.

THE second of the series of non-technical lectures now being given at the Architectural Association, Bedford-square, W.C., was delivered last Saturday by Mr. C. H. James, F.R.I.B.A., whose subject was the design and building of the small house. Mr. R. Randal Phillips, Hon.A.R.I.B.A., occupied the chair.

The lecturer said the majority of people when they approached an architect and asked him to build them a house had no conception of what they wanted beyond a knowledge of the number and size of the rooms. Their ideas on the subjects of planning and general appearance were confined to the arrangement of their present houses and those of their friends. Occasionally an architect met a client with a definite dislike for Georgian houses, or a passion for leaded lights, but such people were usually amenable to suggestions and easy to please. But if a good house was to result there must be mutual understanding between architect and client, and if either party felt this could not be attained it was better for the client to go elsewhere. It should be remembered that an architect had to know nearly as much about his client as the family doctor or lawyer did; he must know approximately his income, his habits, the terms he was on with his wife, what his furniture was like, and whether his circulation was good or bad. The likes and preferences of clients should be respected as much as possible; this would often settle the style of the house or dictate its colour scheme. Recently he had designed a house for a client with a dislike for red. In this case he had built the walls of yellowy-brown London stocks, with grey bricks as dressings and Staffordshire blue bricks for a plinth, while the roof was of green pantiles. It was a colour scheme that he would not have attempted on his own initiative, but he was now much pleased with the result, as was also the client.

The problem of the design of the town house was simple, because being already hemmed in by neighbours, the house should accord with adjoining property. In the country, land was cheap, so houses could be well away from one another, and therefore each could be designed as an architectural whole; but the design of the suburban house offered an almost insoluble problem. It seemed to him that the small single house —by which he meant such a house as a man earning from four to six hundred pounds a year would be likely to occupy—was a mistake. Such houses ought to be combined together in groups, terraces or quadrangles. They should be built by public utility companies and let at reasonable rents to tenant shareholders as at Letchworth, Welwyn, Hampstead and elsewhere; but so long as the average Englishman had a passion for the possession of a freehold house it was difficult to know how this state of affairs could be brought to pass.

In the average suburban street, especially if built before the War, we found on both sides houses of identical design, ignoring the fact that one row faced, perhaps, north and the other south. In such a case one of the rows would have all the principal sitting-rooms facing north and all the larders exposed to the south. Each house had its bay window and an unnecessary gable over it, probably decorated with ½-in. floor boards, travestying the timber framed buildings of Elizabethan times where the timber was an integral part of the structure. Internally the house was planned with two sitting-rooms, one facing the road and the other overlooking the little paved area caused by the projecting kitchen wing. A badly-lighted passage from the front door led past the bottom of the stairs to the kitchen. To-day we laughed at such a plan, but the most ingenious architect could hardly do better with a frontage of 20 ft. out of which had to be taken a passage to the back door of at least 3 ft.; and the fault lay not so much with the builders clerk, who probably designed the house as with the man who, developing the land, sold it so exorbitantly that the maximum number of houses had to be put on the road frontage available. The estate developer would probably blame the local authority for having forced him to put in roads of a specification unnecessarily heavy for the traffic which the road would normally have to carry—there were cases where the roads cost five or six times as much as the original cost of the land. Failing, therefore, what was almost too much to hope—a return to the pleasant little terraces of the late eighteenth and early nineteenth centuries—we should try to get for our detached freehold house as wide a frontage as possible. Width was necessary because the house would probably have houses we heartily disliked built on both sides of it.

Coming to the materials of which the house should be built, the lecturer said that bricks had been for generations the standard house-building material for the greater part of England. Bricks were of many different kinds. The London stock was objectionable to most people, but he personally liked it. Used properly and sympathetically it could look as well as any facing brick made. The home counties abounded in clay, which made pleasant multicolour red to purple bricks, and parts of Sussex and Kent turned out stock bricks of pleasant greyish-brown tone. But the north of England was not so fortunate; it was exceedingly difficult north of Leicester to get a brick of pleasant colour and texture. Further than this, the north-country brick was about ¼ in. thicker than that of the south, and this did not improve its appearance. Obviously in the selection of a brick one must be guided by what was obtainable locally, and what had been used for neighbouring buildings. Cement rendering was a satisfactory method of covering up unpleasant brickwork where good bricks were not available; but it should be sand dashed or roughly finished. Where a white house was desired a beautiful wall could be obtained by distempering over a brick of velvety texture such as the London stock brick. Concrete as a walling material had not proved itself to be either cheaper or more satisfactory than brick.

In the matter of roofs local fashion, if at all dominant, should be followed. Hand-made tiles were preferable to those of the machine in the respect that the latter did not grow beautiful with age. Pantiles made a pleasant roof, but should always have an undercloak of waterproof felt; they should not be relied on to keep out the weather themselves. Slate made a perfectly good roof, and even a beautiful roof if properly used. A thin purple slate cut with machine like precision and used over glaring red brick was hideous, but a thick grey or grey-green slate, not used over red walls, often looked extremely satisfactory. It was proper to use slates in the Lake District, or Cornwall or Wales, or anywhere where slate was quarried. As to thatch, we had all got a sentimental attachment to thatch. It was a warm roof. But it was also a home for birds and mice, and its life was only about five years unless it was a heavy reed thatch, as in Norfolk, or was covered with rabbit wire. Away from town it was appropriate.

Of windows, the lecturer said the sliding sash window seemed to have been imported from Holland in the reign of William and Mary. It was not liable to be blown off its hinges, and the degree of ventilation was very variable; but it was liable to rattle if it slid easily, or if it did not rattle it was difficult to open and shut. Casements had the defects he had suggested when speaking of the virtues of sash windows. Metal casements were better than wooden ones, and we could not be too grateful to the merchants who had standardised the steel casement cottage window. Such a window was as cheap as a wooden one, was easily fixed and did not rattle. There was no real justification for using lead glazing to-day: apparently our windows ought to be glazed with large sheets of plate glass. They should be as large as possible.

The front door was a place where the architect could attempt to make a splash. It could be painted of the brightest colour to be found in the catalogue provided that colour did not quarrel with the surrounding brickwork, but the bright colour should be on the door only; it should not be carried to the surrounding frame and fanlight.

As to the design of the house, the excess of architecture—using that word in its worst sense—had done more than anything else he knew of to destroy the sense of quiet in the country side. Above all, we did not want the reproduction of the antique. In domestic architecture he was not an advocate of revolution, but he expected to see some vitality in the work of the present day. He welcomed all advance provided it was sane and logical, but some of the work now being done by the French and Germans he did not understand. Most of those buildings were of reinforced concrete—a very expensive method of building because of the cost of the shuttering, unless a considerable number of houses could be produced all of similar design. Some houses at Braintree had been designed to be built of reinforced concrete, but actually had been done in brick and whitewashed.

Speaking of heating and cooking, the lecturer said that after six years' experience of a centrally heated house he was now building another for himself in which he would rely on central heating entirely; except that there would be one open fire in the living room. There was nothing to beat an open coal fire, and every house should have at least one. But if a fire was not to be used at least four hours a day gas would be cheaper. He could not see anything to choose between gas and electric fires. Both burned the air in the vicinity and caused catarrh. The advantage of the electric fire was that it required no flue. Grates, whether of electric or gas fires, should not simulate those of earlier periods; such a fire should not look like a Tudor log fire or a coal fire in a basket grate. Gas was slightly cheaper than electricity for cooking, but current was getting cheaper. Where either gas or electricity was available, few people would continue to cook by a coal fire. In the country, oil or coal were the only alternatives; but his own experience of oil had not been satisfactory. For the heating of water nothing could compare with the ordinary anthracite or coke boiler.

Flooring materials were somewhat of a problem, and the lecturer said he did not think a satisfactory kitchen floor had been invented. Most cooks would be found to favour linoleum, either laid direct on concrete or put over a wood floor. Round the cooking stove and the sink, tiles would stand up better to the wear. Elsewhere than in the kitchen, linoleum was a sanitary floor covering, but dismal looking. As between deal floors and those of hardwood, the latter were a real economy and would probably be used in any house costing two thousand pounds or more. They could be in parquetry on the ground floor and boards upstairs. Where stained deal was used the stain should be light in colour, because then the wear would show less. Compressed cork tiles might become the floor covering of the future.

Circumstances must dictate how many cupboards were to go into the house. Some there must be. For example, in the kitchen one was needed for storage of crockery and cooking utensils. Another was necessary for the storage of linen. Apart from these, cupboards if large enough to be of real use decreased the size of the rooms, and movable furniture was to be preferred. A serving hatch between kitchen and dining-room was of little use in a small house with only one servant or none at all; in a larger house a better arrangement was to have a pantry with door direct to the dining-room.

The lecture was illustrated with lantern

slides, some showing the kind of houses which the lecturer condemned, others showing houses which he approved, and some showing modernist houses which he stated he did not understand.

The Chairman said he was very much in sympathy with Mr. James's advocacy of the revived late Georgian type of house that had been shown on the screen. All agreed that since the War there had been a tremendous advance in the design of the small house. He thought cream was a better colour than white for a wall, but the woodwork should be white. Such a colour scheme was much better than staring red brick out of keeping with its surroundings. He agreed fireplaces should not be provided all over the house—nine out of ten of them were very rarely used, and in all such cases it would be far better to build in gas fires flush with the wall.

A member of the audience said the hard pressed brick of the North of England did not let through the water. He had lived now ten years in London and had been cursed with a house built of a very pretty brick, but which was not weatherproof. He would have liked the lecturer to discuss cavity walls.

The lecturer said as to the first point he preferred the water to the red brick of the North of England. Architects nowadays usually specified hollow walls for small houses, or else they had the brick covered with something, e.g., cement. No architect would expect a 9 in. wall to keep out water on an exposed elevation.

A vote of thanks to the lecturer terminated the proceedings.

EASEMENTS OF LIGHTS

MR. JOHN SWARBRICK, F.R.I.B.A., read a paper on "The Depreciation in Value of Property Due to High Buildings" before the Manchester Society of Architects recently. Mr. Harry S. Fairhurst, F.R.I.B.A., a past-president of the Society, was in the chair. The lecturer said that, if certain sites were to be selected for improvement by the erection of soaring skyscrapers, how was the selection to be made so as to prevent the owners of certain sites from securing an enormous advantage over the owners of others and at their expense? Was it in the best interests of the community as a whole that the municipal corporations should be left to determine which firms should be permitted to erect great structures and enormously increase both their rental and site values and at the same time correspondingly depreciate the rental and site values of adjoining sites?

We who have been accustomed in the past to four- and five-story buildings knew how even in them the natural light of the sky was often very largely cut out. The streets between such buildings might be comparatively light, although the sunshine might rarely enter them, owing to the fact that they were exposed to the bright diffused light from the zenith. But what was bound to be the condition of the offices from which the light was intercepted? We all knew from experience that those who worked in offices and factories, in which a minimum amount of direct light from the sky was obtainable, suffered from a variety of forms of sickness and ill-health. We also knew that those who worked out of doors and received the invisible ultra-violet rays, enjoyed, almost without exception, comparatively robust health, did their work with vigour, and took a pleasure in it.

In the past it had been exceedingly difficult to assess in a proper manner what would be a reasonable amount of compensation to pay to a firm whose easements of light had been detrimentally affected by a new building. The difficulty had arisen owing to the lack of means to define scientifically in an absolutely indisputable way the exact nature of the injury that had been done.

Fortunately means had now been found whereby all uncertainty had been removed. There might still be differences regarding the extent to which a specific infringement of light would affect the rental value, but there needed be no uncertainty regarding the precise nature of the infringement. At one time it was customary to measure lighting conditions by means of photometers, but that could obviously only be done when the conditions in question were in existence, as after a new building had been erected. There were, however, considerable technical difficulties in doing that accurately, owing to the rapid variations in intensity of illumination that might be taking place externally at the time. The only way in which photometers could be used satisfactorily in that manner was when two instruments, calibrated so as to give exactly the same reading under identical conditions, were used, both internally and externally, at exactly the same times. In that way it was possible to obtain corresponding readings at the same moment, both within and without the building, and so to obtain reliable results. The most reliable method of measuring loss of illumination was represented by a series of projections on paper which were usually known as sky projections, calculating diagrams, and daylight plans. The new methods were most helpful because they made it possible not only to show exactly how much light would be lost in any interior, owing to the erection of a proposed new building that had not been commenced, but also to prove exactly the amount of light that was obstructed by some previous erection which had been demolished. That was most important.

In making such projections it was, of course, necessary to assume some definite uniform standard of sky luminosity for all conditions, as, otherwise, the ratios on one drawing would not be comparable with those on another. In preparing daylight plans it had also to be remembered that it was the practice to determine the nature of the lighting conditions at table level or approximately three feet above the floor. The plans, therefore, recorded what the effect would be on a horizontal plane at table level, which was the most important plane in the room for ordinary clerical purposes. One of the easement of light drawings most frequently used in the settlement of disputes was the sky projection. A sky projection was usually made so as to show what portions of the sky surface would be obstructed by both the proposed and by the original structures. It was a common practice to assume that the eye of the observer was on the surface of the glass of the window, and at the level of the table or window sill, whichever might happen to be the higher. From the eye, rays of light might be assumed to pass so as to mark on the dome of the sky the areas that would be concealed by both the original and ultimate structures. In the same way, the jamb and head of the window opening would be likewise produced. The practice was to imagine the sky divided into segments of five degrees each way by lines representing celestial latitude and longitude.

Similar projections might be made to show the effect of various points within a room. One of the main disadvantages of a sky projection was due to the fact that it did not take into consideration the variation in value of light from varying parts of the sky for illuminating the horizontal plane of a table. For example, horizontal rays of light would pass over the table without illuminating it directly, if light by reflection were to be ignored; whereas light from the zenith would fall normally on to the horizontal surface of a table giving the value of unity. We, therefore, had light varying in value from zero to unity, according to the position of its source from the dome of the sky. That light had been found to vary in intensity, in accordance with the cosine of the angle of incidence. That was known as Lambert's Law or the Cosine Law of light. Another disadvantage of the sky projection was the extraordinary foreshortening effect that occurred near the extremities of the domical surface, owing to the projection representing a curved surface on the plane of a sheet of paper. Owing to that foreshortening effect and for other reasons, it had become desirable to use a rectangular form of projection, to some extent resembling a portion of Mercator's projection. In that way, the distortion due to the foreshortening effect was avoided. Moreover, in a calculating diagram, the segments were so divided as to make the diagram represent an equivalent illuminating value in all parts. In the case of sky projections with a southern aspect, it was customary to show the apparent paths of the sun at various times of the year and also the hours of the day In that way by examining such a projection, it was possible to ascertain the times at which the sun would be seen on a cloudless day, at various times of the year, under both the original and ultimate conditions. In view of the decision in the case of Colls *v.* the Home and Colonial Stores, it might be contended that even those who had enjoyed direct sunlight for over 20 years, were not entitled to claim compensation in that respect, and that the most that anyone could claim was the loss of direct light from the sky on a normal cloudy day, when sunshine would be obtainable. It would be observed that in the case of both sky projections and calculating diagrams the effect at one point alone was recorded in the case of each drawing. Naturally, the effect, at any one point, although absolutely accurately represented, might be quite misleading as regarded the greater part of the floor area. It was, therefore, desirable in all important cases to prepare in addition large scale daylight plans on which definite percentages of light, on a normal day, under both original and ultimate conditions, could be clearly defined.

A matter of considerable importance to be considered in connection with easement of light cases was the question of what constituted a reasonable amount of daylight. In the case of Colls *v.* The Home and Colonial Stores, it was ruled that a building owner could only acquire an easement in respect of a reasonable amount of light. It was, however, contended that the standard of what constituted a reasonable amount could not be the same for all parts of a large city. For example, it was suggested that it would not be equitable to maintain the same standard for the most favoured part of a city, with most amenities, and where the land was of considerable value, as for the parts that were occupied entirely with industrial establishments and poor property, where the land had a low commercial value. It did not seem unreasonable to contend that those advantages should include a better standard of daylight illumination. Other reasons might also be advanced, as, for example, in the case of areas that had for generations come to be regarded as the headquarters of special businesses that could only be carried on in a proper manner, by means of the access of the best possible daylight. In some businesses, for example, an abundance of the best north light was acquired for dealing with colours, etc. The case of certain quarters of a city being entitled to a higher standard of light for special reasons was an entirely different case to that of a tradesman, requiring an abundance of light, acquiring room in a less expensive part of a city and expecting to acquire there an easement in respect of the abnormal amount of light that he required in excess of that needed by the generality of other tradesmen in the same area.

Society of Apothecaries' Hall: Restoration Appeal.

The Society of Apothecaries of London have decided to issue an appeal for £20,000 to enable them to carry out the restoration of their hall in Water-lane, which has been severely damaged by the death-watch beetle. The scheme is being directed by Sir William Wells, of Messrs. Chesterton and Sons, surveyors.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—ED.

Client's Dispute with Builder.

[REPLY TO "S. C.," NOVEMBER 30.]

SIR,—The wording given by "S. C." in the disputed schedule is indicative of its vagueness. How much easier it would have been to say: "Flush switcher to be *provided* and fixed"; and similarly with the main switches, fuses and plugs. My interpretation would be *to wire only* to the points indicated; to *fix only* flush switches assumed to be supplied by "S. C."; for mains to be brought in from road to meter positions inside the building, although the water main should obviously be described elsewhere to be taken to a tank or laid to specified points off the main. Why, however, is it not possible for specifications and schedules to be clear and explicit in defining exactly what is required?

As to the mantels, I should doubt the so-called trade custom of selling a veneered article as a mahogany mantel. I have never yet come across any but solid mahogany. At the same time, it would not be surprising to find American whitewood, stained and polished, masquerading as mahogany, and this is particularly noticeable in the furniture trade. F. S. I.

SIR,—This is clearly a case where a building venture has been undertaken without professional advice and supervision. The situation is merely another proof of the unwisdom of undertaking building without the appointment of an architect. I consider the builder has a fair case for reading the clause, "Flush switches to be fixed," as merely a guide to the run of wiring. It has several times been ruled that wiring consists in running to points only, terminating at the bare ends of the wires at the various points. The distinction is a thin one, but your correspondent will have difficulty in controverting it. I think a veneered mahogany mantel meets the other question quite sufficiently. ARCHITECT.

SIR,—Where a building contract provides for electric "points" it is generally understood that this includes everything complete for each point, except the electric fittings themselves. Also, of course, the meter is not included. "S. C." is therefore right in his contention; and the builder cannot refuse to supply, unless he can show (which is on the face of it doubtful) that it was never the intention of the parties that the switches, fuses, etc., were included in the contract.

There is no custom of the trade which determines that a veneered mahogany mantel can be substituted for a "mahogany mantel." A mahogany mantel is one built up of solid mahogany of varying thickness. "S. C." may therefore reject the one supplied, or, if he accepts it, some allowance should be made to him by the builder therefor. CONTRACT.

Unpriced "Extra."

[REPLY TO "CLAIM," NOVEMBER 30.]

SIR,—I am afraid the reply of "Claim," relative to this query, may be misleading. Whether quantities do or do not form part of the contract is immaterial, their inclusion in a contract concerns only the actual quantity of work involved, affords a method of adjustment for any errors contained therein, and money values, such as rates, extensions and costs, have nothing to do with the case. Strictly speaking, the contractor is entitled to nothing; but supposing there was a relatively small quantity unpriced in the bill, and assuming that a sharp professional man, noting it, took advantage and increased the quantity many times, it would be obviously unfair to allow the contractor nothing; in fact, the contractor would be justified in refusing to do this particular extra work under such conditions. F. S. I.

Cleaning Marble.

[REPLY TO "DESIGNER," NOVEMBER 30.]

SIR,—Acids should be avoided, or used very sparingly, upon marble work. The yellow stains are actually signs of a chemical action that has taken place between the acid and the carbonate of lime. CARE.

SIR,—"Designer" mentions that he has used spirits of salts for cleaning marble monuments. This should not be used in connection with the cleaning of Sicilian marble, and no doubt that which has come out in yellow blotches is somewhat old and has been badly burned by using the spirit. The best method is to take a mason's tool, or tools of various sizes, and sharpen them in the same manner as a carpenter's chisel. If this is used with the flat face to the job it will be found that the marble readily scrapes; it may then be finished with either a natural fine gritstone or one of the manufactured varieties, such as a royden. Spirits of salts should not be used at all, but if there is a good deal of high relief foliage work and the dirt has penetrated well into the recesses, then a little of the spirit, diluted with water, could be used with a brush, but it must be washed away immediately with clean water. HARRIS & SON.

Rental of Shops.

[REPLY TO "PLANNER," NOVEMBER 30.]

SIR,—This is purely a matter of district, and rentals vary enormously. I should say that a fair figure would be £8 to £10 per foot frontage in a place of the size mentioned. ESTATE.

Stock Bricks.

SIR,—Is it sufficient to specify "stock bricks" to ensure that these shall be hand-made, and possibly clamp-burnt; or is a fuller specification needed? TEXTURE.

SOCIETIES AND INSTITUTIONS

WEST YORKSHIRE SOCIETY OF ARCHITECTS.

Members of this Society held their third meeting of the session at Leeds on November 29, when they met to hear Mr. Leonard Whitaker, winner of the Society's travelling studentship, lecture upon his experiences whilst travelling abroad in search of objects for study. On the suggestion of Mr. G. H. Foggitt, A.R.I.B.A., the president, the chair was taken by Mr. J. R. Tolson, a student of the Leeds School of Architecture. Mr. Whitaker gave a graphic account of his travels in France, Switzerland, Italy, Austria, and Bavaria, illustrated by lantern slides.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS.

Lecturing before this Institution on "Heating and Domestic Installations—the Insurance Point of View," at Caxton Hall, on November 7, Mr. G. A. Cottell, after briefly explaining the usual policy, referred to the fact that insured plant was inspected three times a year and a full report sent to the insured, describing the condition of the plant, and containing any recommendations considered desirable in the interests of safety and economy. Such certificates were accepted by the Home Office and other authorities that the apparatus was in order for service. He then discussed insurance requirements in the form of safety devices and fittings which may be regarded as good engineering practice, and pointed out numerous troubles likely to occur. He further dealt with the arrangements for inspections, working conditions and maintenance, illustrated by typical examples which lead to trouble

TOWN PLANNING LAW

IN the course of a lecture on this subject to the Auctioneers' and Estate Agents' Institute of the United Kingdom, on Thursday, Mr. John A. Rosevear, F.S.I., said that the Ministry of Health contemplated that usually in a scheme it would be possible for the Authority to divide the areas into two classes:—

(*a*) those likely to be developed in the immediate future, and

(*b*) those not likely to be developed for a considerable period of time, but which it is necessary to include to obtain control, *e.g.*, areas across which it is desirable to preserve the lines of arterial roads.

As regards the former, Clause 29 of the "Model clauses for use in the preparation of schemes" enabled the Town Planning Authority by means of a table to lay down the predominant and subsidiary uses to which properties could be put in the several zones. Usually the first column showed the predominant use, *i.e.*, buildings which might be erected without consent, the second column the classes of buildings allowed with the express consent of the Authority, which consent might be accompanied by definite conditions, and in the last column classes of buildings absolutely excluded from the zone. For example, in a residential zone, column 1 would contain "dwelling-houses" and "residential buildings" (*i.e.*, flats), column 2 might consist of shops, business premises and public buildings, and column 3 would probably be industrial buildings. In the case of applications to the Authority to give consent to the erection of buildings which might conflict with the predominant use in a zone, the Authority were obliged to advertise their intention before giving consent in order that adjoining owners and other interested persons might make objection to the proposals; with the right of appeal to the Minister.

Under Clause 31, height was now controlled by a rather different method, and instead of being limited by the distance from the main front wall of the particular building to the opposite boundary of the street it fronts, was limited by a line drawn at a stated angle from the "centre" of the street in front of the building. A very usual angle was 56 deg. in the case of shopping or industrial streets, and 45 deg. in residential streets. Hence in a 40-foot street, with a building line of 20 feet, dwelling-houses would be limited in height to 40 feet. There was also a general limitation to apply throughout the scheme, and this was often fixed at 70 feet. Industrial buildings were usually exempted when in industrial zones, but where allowed by consent in other zones, would be naturally controlled in height. The height of places of assembly, such as public halls, theatres, etc., might be allowed to exceed the limits by special consent of the Authority.

Space about buildings was provided for by a table set out in Clause 32 which gave varying proportions of site allowed to be built over according to the class of building. Some schemes laid down that, in the case of shops with two floors of living accommodation over, or where the height exceeded 30 feet, only one-third of the site might be occupied by the buildings. That in practice was rather onerous in the case of a block of contiguous shops, where usually the building line would not be more than 10 feet to 15 feet, and left a rather unnecessary amount of site unoccupied in the rear. Apparently that was the proportion suggested by the Ministry, but in his opinion it should be one-half, and especially in urban areas, where land values were high and the one-third stipulation meant a too heavy site value for the individual shop. At the discretion of the Council the proportions might be increased

where the buildings abut on two or more streets.

He thought there was little doubt that this clause would be adopted and incorporated in the Model Clauses, and it should certainly prevent a repetition of the horrible "bungaloid growths" now spoiling our beautiful countryside. The fear is that it will come too late.

Clause 33 had a bearing upon design, for it limited the number of houses or residential buildings allowed to be erected in a continuous block, and the Ministry suggested eight as the limit. Also the same clause suggested a limit of 6 feet between a distance of at least 3 feet between an owner's boundary and any residential building or dwelling-house he wished to erect. Also such buildings were not to be built nearer than 3 feet to any other type of building allowed in the zone. Those stipulations all take effect after a fixed date settled by the Town-Planning Authority.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

The Architects' Bill.

On Tuesday the House of Lords considered the Architects' (Registration) Bill in committee, and agreed to a number of minor amendments which left the principle and the structure of the measure unaltered. These amendments provided for the application of the saving clause to the Surveyors' Institution, and for the inclusion of that body in the associations entitled to be represented on the Admission Committee on the nomination of the Council of the R.I.B.A. Lord Crawford, who is in charge of the Bill, said the amendments, which appeared in his name, had been accepted by the R.I.B.A.

Lord Salisbury, Lord Privy Seal, said the Government had not put down any amendments at that stage, but it was possible that, on the third reading of the Bill, an amendment would be moved which he hoped Lord Crawford would be able to accept. It would not be an amendment of any great importance.

In the course of the discussion Lord Crawford, replying to a question by Lord Danesfort, said the Board of Architectural Education was invested with large powers and discretion in the matter of time, place and nature of examinations. It was empowered to appoint and to delegate its responsibilities to sub-committees. There was a tendency at the present time to ensure variety in architectural education, which was an excellent thing in artistic matters, and he hoped that that tendency would be maintained by the Bill. The Bill, as amended, was then reported to the House.

Slates for Roofing.

Mr. C. Edwards asked the Minister of Health whether, seeing that the price of slates for repairing roofs after the storms of a week ago was raised from about 3d. per slate to 1s. 11d., he would instruct the Building Materials Committee, if still in existence, to inquire into this increase with a view to preventing that in future.

Sir Kingsley Wood said that no such increase in the price of slates as was suggested had been brought to the notice of his Department. If, however, the hon. member had any information in his possession indicating a general increase in prices and would furnish him with particulars, he would be pleased to have the matter looked into.

Mr. Edwards inquired if the Minister of Health would instruct local authorities to keep in stock a supply of slates for roofing purposes, so as to supply small house owners for repairs at cost price *plus* the cost of the authorities for storing and delivering same.

Sir K. Wood said that the Minister could not give any such direction to local authorities; they had, in fact, no powers enabling them to do what the hon. member suggested.

Price of Bricks.

Sir K. Wood informed Mr. Wellock that the following statement showed the prices of bricks in certain districts at April, 1914, January, 1924, and October, 1928, the latest date for which information was available :—

District and Description.	Price at April, 1914.	Price at January, 1924.	Price at October, 1928.
	s. d.	s. d.	s. d.
LONDON (WILLESDEN)—			
Fletton (delivered site)	22 6	59 3	69 0
BIRMINGHAM—			
Common (Local) (at yard)	27 6	55 0	60 0
BRISTOL—			
Common (Local) (at yard)	24 0	60 0	50 0
LEEDS—			
Common (Local) (at yard)	25 0	45 0	40 0
MANCHESTER—			
Fire-cut (delivered site)	28 0	55 0	50 6 and 52 3
NEWCASTLE-ON-TYNE—			
Common (Local) (at yard	29 0	55 0	40 0
SWANSEA—			
Common (Local) (delivered site) ..	36 3	59 0	57 6

London Squares.

Sir Robert Thomas asked the Minister of Health, with regard to the preservation of the London squares, whether, if time could not be allotted during this session for a detailed Bill to protect them, he would introduce a brief measure enacting that no more of those open spaces should be sold until such time as the matter could be dealt with in detail.

Mr. Chamberlain said he feared that it was impracticable to introduce such a measure this session, in view of other claims on Parliamentary time.

State Loans.

Mr. Chamberlain informed Lady Astor the following statement gave particulars of the Exchequer contributions paid to Public Utility Housing Societies under the Housing Acts so far as the information was available :—

	A.	B.
Housing, Town Planning, etc., Act., 1919 ...	81	£1,460,091
Housing, etc., Act, 1923...	5	1,198
Housing (Financial Provisions) Act, 1924 ...	3	5,899
Total ...		£1,467,188

A.—Number of Public Utility Housing Societies to whom Exchequer subsidy has been paid.

B.—Amount of Exchequer subsidy, etc., paid to November 25, 1928.

The Subsidy.

Mr. Wellock asked the Minister of Health if he was aware that many local authorities were holding back decisions on house building until they knew whether the present subsidy was to be continued after March next; and if he could now make a pronouncement upon this question.

Mr. Chamberlain said he hoped to be in a position to make a statement very shortly.

Slum Clearances.

Mr. Kirkwood asked the Minister of Health whether he was aware that public authorities were to-day giving compensation to slum owners for the removal of their slums.

Mr. Chamberlain replied that any compensation paid by local authorities to owners on the compulsory purchase of slum property included in a clearance scheme was calculated in accordance with the provisions of the Housing Consolidation Act of 1925.

New Bill.

Sir Robert Gower has presented a Bill to amend provisions in Part II of the Housing Act, 1925, relating to improvement and reconstruction schemes.

HANDCRAFT INDUSTRIES

THERE is a stimulating atmosphere about this exhibition of handcraft industries at the Royal Horticultural Hall, as of something growing and significant, fresh in its outlook, with promise of more to come. It is encouraging to turn our eyes forwards and see the foreshadowing of a national impulse towards beauty in everyday things, and we can do it here. This, the sixth exhibition, is the largest yet held, and it is refreshing to see handcraft making a place for itself on the ordinary terms of industry, and though the bazaar element is not altogether absent, there is no sense of its prevailing, and the exhibits, taken as a whole, show a high standard of sensibility and accomplishment, while the prices are competitive and not out of the reach of the intelligent ordinary public. The claim made that the exhibition affords an opportunity of obtaining objects of real distinction in the field of decorative craftsmanship is more than justified in the best of what is shown, though naturally there is a wide difference in the level of accomplishment. We should expect this, however, where there is no selection committee, and the much wiser course is taken of leaving that part to the public, who are, after all, the most impartial judges.

We can make no pretence of an exhaustive survey in the case of so large an exhibition, but special credit is due to Madame Antoinette Boissevain, director of the Merchant Adventurers, Church-street, Kensington, to whose taste and enterprise in visiting and selecting, in the countries represented, the exhibits shown in the European Applied Arts Section, the exhibition owes much of its success. Amongst these, mention must be made of the remarkably well modelled animals in glazed pottery by Friede Maruhn (Germany), in which there is much vitality, and a noticeable sense of style. The Kayler pottery (Denmark), the Primrose pottery (Holland), Persian pottery (Germany), by Margarete and Friedrich Hudler, include many attractive examples, the pots of the latter being specially fine in form and colour, in which orange and grey-black predominate. The "Yac" artificial flowers made up into posies, and, for personal adornment and decoration, of feathers and glass, show both refinement and delicacy of colour combined with the charm of nature, and are one of the most enchanting features of the exhibition. The Merchant Adventurers' stand includes a display of suitable and tasteful gifts. Nor must we forget to mention the accomplished modelling of animals, single and groups, which show fine appreciation, by Stella R. Crofts, whose rare gift in this direction we are glad to see becoming so widely recognised. And so we might go on to particularise, amid many other exhibits deserving of special mention, such as the work of the Sibley pottery (Wareham), so good in shape and glaze, the various exhibits of handwoven textiles, delightful in texture and colour—but that space precludes further mention. Making no special claim for themselves, the promoters of this handcraft exhibition wisely leave the work to speak for itself, it being neither "sicklied o'er" by any philanthropic aims nor sense of superiority, and we see in it an instance of that new spirit, and the discounting of movements making sentimental claims. It was so greatly the misfortune of the Victorian era that it felt itself to be good, and this complacency led to a restless desire to improve things. Here the outlook is so much healthier that the work advances on its own merits.

This is an exhibition the Christmas shopper should not fail to visit, both in his own interests and on the public grounds of supporting the craft-worker, whose salutary influence permeating industry—and it is permeating it—is perhaps the most hopeful feature of the present time. The exhibition remains open until December 7.

THE BUILDING TRADE

EVERYDAY SCIENCE FOR ARCHITECTS AND BUILDERS—XLV

By A. M. GILES, B.Sc., A.I.Struct.E., A.M.I.E.E.

Water.

Whereas air is a mixture, water is a chemical combination of gases. Pure water is a clear, colourless, tasteless liquid, the freezing point of which is 0 deg. C. or 32 deg. F., and the boiling point 100 deg. C. or 212 deg. F. It is a definite combination of the two gases, hydrogen and oxygen. There are various ways by which it can be decomposed and by which it can be shown to consist of two volumes of hydrogen combined with one volume of oxygen, or two parts by weight of hydrogen combined with 16 parts by weight of oxygen.

Thus: $2H_2O = 2H_2 + O_2$.

When the average person speaks of water, it is more than likely that he is referring to drinking water, *i.e.*, water which is pure and wholesome and fit for drinking. Really this kind of water is not pure at all, since it contains many substances in solution, and these in some way tend to make it, as drinking water, more palatable. We are here more particularly concerned with the chemical attributes of water. That water is very widespread, and that its prevalence is almost unlimited, none can deny. It has been truly said that "the records of geology are mainly the history of the work of water"; further, it has been suggested that three-quarters of the earth's crust is composed of water. Most of our foods contain large amounts of water, and even the rocks of which the earth is composed will, upon calcination or burning, yield water.

Water exists or is found in three different states., viz.: gas, liquid, and solid. Gas as moisture, vapour, or steam; liquid as water; and solid as ice. Water vapour is always present in the air, and, as hinted in the preceding article, this, by its property of dissolving or combining with certain gases that are also found in the atmosphere, can produce most pronounced and destructive chemical effects.

Some time ago an inquirer, in a letter to *The Builder*, was asking how to prevent the condensation of the water vapour of the air upon the inside of shop windows. One reader, in his reply, suggested that it could be prevented by burning small gas-jets in the space near the window. This, however, could only be effective provided the window glass were kept warm enough to prevent condensation upon it. As a matter of fact, the burning of gas is only increasing the amount of water-vapour, or moisture, in the air, and this would continue until the air became saturated, when the smallest drop in temperature would at once cause condensation to take place and make matters worse. The real remedy is to make the window-fitting air-tight after having previously placed in it some chemical substance, which will absorb or combine with the water-vapour present and leave the air quite dry.

Calcium chloride is a substance that is commonly used as a moisture absorbent. In its crystalline form its formula is $CaCl_2 . 6H_2O$, which means that calcium chloride proper has combined with 6 molecules of water. If the crystalline form be strongly heated, the water of crystallisation is driven off and we are left with anhydrous (without water) calcium chloride. This is the substance that is used as a moisture absorbent. It is a white, lumpy powder which absorbs moisture from the air very quickly, and in doing so even liquefies.

Among other substances that can be used as moisture absorbents are alumina (Al_2O_3), found in nature as colourless corundum; pieces of pumice stone soaked with concentrated sulphuric acid (H_2SO_4); lime (CaO); and flowers of phosphorus, or phosphorus pentoxide (P_2O_5).

Impurities in Water.

Rain water, collected towards the end of a long and heavy shower, will possibly be the nearest approach to naturally pure water. The previous part of the shower will have dissolved any impure gases that were in the air, as well as having carried down with it any dust particles that were floating about. The only way to get really pure water is by distillation. This is carried out by causing the steam from boiling water to be condensed and collected in a clean vessel. Where large quantities of distilled water are wanted for solvent and other purposes, a firm will most probably have its own distillation plant.

The impurities in water may be either suspended or in solution, or both. The suspended matter can be got rid of by allowing the water to stand, when it will settle; or it can be removed more effectively by filtration. In the latter case the impure water is passed through a filter paper, when the suspended particles will be retained on the paper. Filter paper is something like blotting paper. A piece, circular in shape, is first folded to form a semi-circle, and then folded again to form a quarter-circle. It is then opened to form the shape of a cone. when it will fit inside a funnel. The liquid can then be poured into it, when it will pass through the paper, leaving the impurities behind. The process of filtration is adopted by many people for purifying or clarifying a liquid of suspended impurities.

Matter in solution, however, can never be removed by filtration or by settling. It actually seems to have entered into chemical combination with the water. It can be removed only by evaporation to dryness, *i.e.*, by boiling the water and catching the steam as it comes off—just as in the process of distillation—and leaving the dissolved impurity behind in the evaporating vessel.

Soft Water.

By most of us, rain water is known as soft water. It is probably so-called because of the ease with which it makes a "lather" with soap. In fact, one of the tests of soft water is that it should at once form a lather when shaken up with a few drops of soap solution. By far the most important thing about soft water is the property it possesses of dissolving lead. Some people express it by saying that the lead is eaten away by soft water. Where lead pipes are used for conveying soft water from place to place, they gradually wear away because of the solvent action of the water. It is dangerous to use this water for drinking or cooking purposes, since lead is poisonous, owing, particularly, to its cumulative effect upon our bodies. We are also told that hot water dissolves lead more readily than cold water. This is probably because the water, after having been heated in the boiler, is deprived of many of the substances that it held in solution before passing into the boiler.

It is sometimes useful to be able to decide whether there is any lead in water that is suspected of containing it. To do this, one passes sulphuretted hydrogen gas (H_2S) into the water, and, if the faintest trace of lead be present, a black discolouration at once takes place, owing to the precipitation of lead sulphide (PbS). The lead appears to have a very decided preference for combining with sulphur, and will, as it were, seize it from almost any other compound that contains it.

Hard Water.

The consideration of the chemistry of hard water seems to fall most naturally under two headings, viz.: temporary and permanent hardness. Among the many differences that exist between soft and hard water, three seem to stand out.

(*a*) Their effect upon soap solution.

Soft water lathers quite easily when shaken with the tiniest quantity of soap solution. Further, those people who at any time have used soft water for washing will not fail to have noticed how easily and quickly the soap lathers.

Water which is temporarily hard will, after having been boiled, lather with soap solution fairly easily, whereas permanently hard water, even after boiling, will show hardly any tendency to lather until at least a large quantity of soap solution has been added.

(*b*) The substances in solution.

As stated above, soft water contains hardly anything in solution except, perhaps, a small quantity of atmospheric gases, while hard water will contain many salts, mainly those of calcium and magnesium.

(*c*) Their effect upon lead.

While it is known that soft water will dissolve lead, it is also known that the passage of hard water along lead pipes causes a protective coating of lead carbonate ($PbCO_3$) to form upon the inside surface of the pipes, thus preventing any further solvent action, since lead carbonate is insoluble in water.

The following experiment is considered to be one of the most interesting in connection with the temporary hardness of water, and one that anyone can try for himself.

Slaked lime—$Ca(OH)_2$—is slightly soluble in water, about 1½ parts per thousand, and its solution is called lime-water.

Place a small quantity of clear lime-water in a drinking glass, then, using a piece of glass tubing, blow with your mouth bubbles of air through the lime-water. The latter will very quickly have a milky or turbid appearance. Continue to blow bubbles of air through the liquid and it will presently become quite clear again. The liquid is now temporarily hard water. If the water now be boiled it will again become cloudy, and, if allowed to stand, the cloudy matter will settle at the bottom of the glass and leave the liquid above it clear.

The chemistry of these actions is fairly simple. The carbon dioxide (CO_2) in the exhaled air interacts with the slaked lime ($Ca(OH)_2$) to form chalk ($CaCO_3$).

Thus: $Ca(OH)_2 + CO_2 = CaCO_3 + H_2O$.

The continued passing of the CO_2 contained in the breath causes the chalk to be dissolved, thus making the liquid clear again. Boiling this liquid sets free the CO_2 when the chalk is again precipitated. This is an elementary way of looking at what happens in nature. Rainwater which has dissolved the CO_2 in the air percolates through the ground before it collects in wells and springs. On its way it dissolves certain carbonates such as those of calcium and magnesium. The water containing these is temporarily hard and is used as drinking water. On boiling or heating it the CO_2 is given off and the carbonates are deposited as "fur" in kettles and "fur" or "scale" in pipes and boilers.

Permanent hardness of water cannot be removed by boiling since it contains sulphates and chlorides in solution, and these can only be removed by the addition of a large quantity of soap — uneconomical — or some common washing soda, sodium carbonate (Na_2CO_3), which, of course, spoils it for drinking purposes.

EXTRA-CONTRACTUAL LIABILITIES OF EMPLOYERS AND CONTRACTORS—I

In Mr. A. A. Hudson's standard work on "Building Contracts" the third edition contained a chapter headed "Liability of Owners and Contractors for Nuisance and Negligence," but in his last edition Mr. Hudson, to economise space, omitted this chapter as extraneous in a work dealing with contracts, the questions involved being extra-contractual, and as many years have elapsed since the appearance of this third edition in 1907, perhaps a useful purpose may be attained by a brief consideration of this subject.

A person who undertakes an operation, even on his own land, or who employs a contractor to carry out the operation for him, has to consider many things outside the building or engineering contract. There are, in the first place, the numerous statutory restrictions imposed under such Acts as the Public Health Acts, the Street Acts, the Factory Acts, and many others, for we live in an age of restrictive legislation; but apart from these, which are outside the scope of these observations, he has to consider whether his operations will cause a nuisance or occasion a trespass, and if the work is being done under his direction and control he has to see that it is performed properly and carefully, or he may become liable to claims for negligence. His extra-contractual liabilities will be found mainly to lie under these three headings, negligence, nuisance, or trespass. Before touching upon cases falling under these three headings, it may be useful to say a few words on the position of a person who employs a contractor to do the work for him.

Position When Contractor Employed.

Where a contractor is employed and the person employing the contractor parts with all control over work to be performed, then if the nature of the work to be performed is such that if properly carried out no injury to others is a necessary consequence, the contractor will alone be liable if he so performs it as to cause such injury (Bower *v.* Peate (1876), 1 Q.B. 321). But it is otherwise where the law casts a duty upon the person ordering the operation (Percival *v.* Hughes (1883), 8 App. Cas. 443), or if the work as designed to be performed is of such a nature that it cannot be carried out without risk to others, for in such cases the person employing a contractor cannot divest himself of the duty of seeing that reasonable skill and care are exercised in performing the operation (Penny *v.* Wimbledon Urban Council, 1899, 2 Q B 72).

Percival *v.* Hughes was a party wall case. The defendant was owner of a house separated from the adjoining house by a party wall, and he pulled down his house, employing a contractor to do this and rebuild it. In the course of the rebuilding the contractor cut through the party wall, an act not authorised by the contract, and damage was caused to the plaintiff's house. The House of Lords held that the law cast a duty upon the defendant to see that reasonable care and skill were used in operations which involved a use of the party wall, and that the defendant could not rid himself of responsibility by delegating the performance of the work to a third person.

In Penny *v.* Wimbledon Urban Council, the district Council were making up a highway not repairable by the public at large, and employed a contractor to do the work; the contractor left a heap of soil on the roadway unlighted and unprotected, and a member of the public was injured. Both the Council and the contractor were sued, and the jury awarded damages against both. The Court of Appeal held that the Council was liable as well as the contractor, for when a person through a contractor does work which from its nature is likely to cause danger to others, there is a duty on his part to take all reasonable precautions against such danger, and he does not escape from liability for the discharge of that duty by employing the contractor if the latter does not take these precautions.

The case of Holliday *v.* National Telephone Co. (1899, 2 K.B. 392) illustrates the double proposition of control and a dangerous operation. The Telephone Company were laying wires down a street, and they contracted with a plumber to solder the joints. The plumber used a lamp, which he ought to have known was defective, and it exploded and injured a passer-by. There was evidence that the plumber was acting under the supervision of the Telephone Company's foreman, and that one of their men was assisting him, and the Court of Appeal held the Telephone Company liable not only upon the ground of control (the plumber not being an independent contractor, the operation being carried out jointly and both parties being liable for any negligence), but also on the ground that the operation being a dangerous one near a highway the Telephone Company, even if the plumber had been an independent contractor, could not relieve themselves from the duty of seeing that proper precautions were taken.

The above rules, however, are subject to an important exception, for the negligence of the contractor must be connected with the duty he is employed by the principal to perform to make the principal liable; for a careless or negligent act, collateral to that operation, the principal will not be liable unless he is exercising such control that the relationship of master and servant can be said to exist between him and his contractor. In other words, he is not liable for collateral negligence on the part of an independent contractor or his servants. In Holliday *v.* National Telephone Co., there was the element of control, but apart from this, Lord Justice A. L. Smith indicated that the using of the imperfect lamp was not casual or collateral negligence, being negligence in the very act the contractor was engaged to perform.

In Hardaker *v.* Idle District Council (1896, 1 Q.B. 335), Lord Justice Lindley said that it was not always easy to avoid mistakes in applying this principle to difficult cases, neither was it easy to express the principle in terms which will apply to all cases, and all we can do is to cite one or two examples. The case above of a defective lamp being used on the actual operation contracted to be performed may perhaps be taken to represent the extreme in those cases where liability has been held to attach to the principal, and may be compared with an example given in Penny *v.* Wimbledon Urban Council (*ubi sup*) that if a workman of the contractor had in that case merely left a pickaxe in the road, that would have been collateral negligence. Or we may take an example cited in Hardaker's case (*ubi sup*), from the two cases Reedie *v.* London and North-Western Railway Co. (4 Ex. 244) and Hole *v.* Sittingbourne and Sheerness Railway Co. (6 H.L. 488). In the first of these cases the contractor was employed to build a bridge, and one of his workmen carelessly let a stone fall upon the plaintiff, and this was held collateral negligence, for which the principal was not liable. In the second case, which also related to a bridge, the plaintiff was injured by a defect in the bridge itself, due to fault on the part of the contractor, and here the principal was held liable.

In all cases, however, to make the owner liable, the relationship of principal and agent must be shown to exist. Thus in Hurlstone *v.* London Electric Railway Co. ((1914), 30 T.L.R. 398), where an agreement had been entered into between the railway company and a firm of contractors whereby the latter were to build a superstructure over the company's station and to have a 99 years' lease of the same, and the scaffolding and hoardings necessary for the work of construction, including a gantry, were to be approved by the railway company, the Court of Appeal held that the agreement created no relationship of principal and agent: that the railway were mere reversioners, and the fact that they had the right to approve the plans did not make them responsible for damages in an action for damages for a defect in the gantry. In that case the building adjoined a public street, and a passer-by had been injured by a fall of timber. The plaintiff sued both the railway company and the contractors, and the jury had awarded damages against both of them on the ground that sufficient protection to the public had not been provided. There was no evidence as to how the timber fell.

The principles we have set out above as applying between the principal and his contractor also apply as between a contractor and his sub-contractor, and a more recent case, Padbury *v.* Holliday and Greenwood (*The Builder*, July 5, 1912; 28 L.T.R. 494), as between a contractor and his sub-contractor, illustrates the last point we have been dealing with. There a contractor was employed to erect a building and he employed a specialist to put in metallic casements. One of the men employed by this sub contractor, in doing the work, placed a tool on the sill which was blown off by the wind and injured a passer-by, who sued the contractor. It was held that the injury was caused by the collateral negligence of the workman of the sub-contractor, and that the contractor was not liable.

It is not, however, against public policy for the principal to take an indemnity from the contractor and to enforce it against him, Newcombe *v.* Yewen Rural District Council (*The Builder*, March 7, 1913; 29 T.L.R. 299). There the facts were very similar to those in Penny *v.* Wimbledon Urban Council (*ubi sup*). The Council had employed a contractor to do work involving an excavation by the side of a road. The contractor left it in an unsafe condition and a passer-by was killed. His widow brought an action against both the Council and their contractor, and the jury returned a verdict as against both of them. The Council were seeking to be indemnified by the contractor under an indemnity clause in the contract, and the contractors raised the defence that there could be no contribution as between tort feasors, but the Court held such an indemnity was not contrary to public policy, and a declaration was made enforcing the indemnity, including the costs of the action.

The rule of law that there shall be no contribution between tort feasors is based on public policy. An action can be brought against both of them, but if damages are awarded against both, execution can be levied against either, and if the damages are recovered against one, the other cannot bring an action for contribution. If an action is brought separately against one and judgment recovered against him, an action for the same cause cannot be brought against the other.

In conclusion of this article we may mention a subsidiary point as to payment into Court which arose in Penny's case (*ubi sup*) The contractors in that case had denied liability and set up the defence of contributory negligence, but with the denial of liability they had paid £75 into Court in satisfaction of any claim. The Council had also denied liability, but with a separate defence that the contractors were independent contractors. They had made no payment into Court, but in their pleadings had merely alleged that the payment made by their co-defendant was sufficient to satisfy the plaintiff's claim. In the result the damages awarded against both defendants were less than the sum paid into Court by the contractors, and thus as regards those defendants judgment was entered for them. The Council, however, having made no payment into Court, had no defence to the action, for it was held that the recovery of £50 against the contractor was no satisfaction of the

cause of action as against them, and judgment must be entered against them, but as the plaintiff was not entitled to get damages twice over, the judgment must be for costs only. It was, however, pointed out by the Court that the two defendants might have joined in the defence of a payment into Court, or the defendants, in their defence, might have adopted the defence of their co-defendant of payment in, if in that defence they agreed to abide by all the consequences.

THE LAW RELATING TO CONTRACTS

IN the second of two lectures on "Contracts," delivered at the College of Estate Management, Lincoln's Inn Fields, on November 27, Mr. W. T. Creswell, Barrister-at-Law, dealt with some legal points in relation to the subject. Equity, he said, looked to the intention of the parties rather than to the form of the contract. The courts would not enforce specific performance of a contract if there was a mistake in it which would inflict great hardship, and, as a general rule, they would not enforce such performances unless they found that it was just, possible, effectual, and necessary—four conditions.

Dealing with breaches of contract, the lecturer said that an employer—that was, the person giving the order to the contractor—might, of course, prevent performance by rendering himself incapable of performing his part of it; he would not necessarily be requested to perform it, but he would be liable for the breach. There might also be prevention of performance where the employer himself employed specialists who failed to supply material or labour. Prevention was brought about in some instances by failure of the employer to employ an architect, whose certificate was precedent to payment for work done; and it amounted, no doubt, to prevention by fraud if the employer prevented the contractor from obtaining a certificate to which he was entitled. A sum was often fixed in a contract, to be paid by a person who broke it. Such sum was not always recoverable. The court might conclude that it was merely a form of penalty, in which case it would not award more than the actual damage.

Dealing with the position of the architect as the agent of the employer, the lecturer said that the architect's function was to obey the employer's lawful instruction, but he must remember that he had a duty to the contractor as well as to the employer. If there was any dispute between the employer and the contractor, the architect's intervention was that of a quasi-arbitrator (subject to the terms of the contract), and not solely that of agent of the employer.

Finally the lecturer discussed the question of sub-contracts. If a contract did not contemplate actual personal performance by the contractor he might sub-let, under his own superintendence, but he was liable for the faults of the sub-contractor. The employer could not withhold payments due to the general contractor and make them to the sub-contractors or specialists, unless the general contract provided that this might be done. A recognised form of sub-contract was needed for the benefit of all parties.

BUILDERS' BENEVOLENT INSTITUTION.

Mr. F. B. Walton, F.I.O.B., took the chair at a special general meeting of this Institution, held on November 27, at 34, Russell-square, W.C.1. Among those present were Messrs. Geo. V. Nash, V. S. Foster, G. J. Aldous, F. M. May, C. J. Trollope, R. Pearmain, Ben Carter, and the secretary W. J. Rudderham. Business was of a purely formal nature, consisting of the passing of two amendments to the rules of the Institution. It was decided to amend Rule III, first paragraph, by the insertion after the words "ten consecutive years at least" in the sixth line of the words "except in special cases." This allows the Committee, in awarding pensions, to use its discretion.

"OWNERS" UNDER THE HOUSING ACT

WE may call attention to a point affecting professional persons recently decided under the Housing Act in the case Watts *v.* Battersea Borough Council (Weekly Notes, November 24). In 1922, a Mr. Wallis, who owned three houses "suitable for occupation by the working classes," died, and some litigation ensued as to his testamentary dispositions, which were eventually settled, and his widow took out letters of administration with the will annexed. Under that will two of the houses passed to his widow and one to his son. Mr. Watts, the appellant in this case, was a solicitor who had acted for the widow in this litigation and instructed a person who had always collected the rents for the deceased to continue to collect the rents, and not to part with them, as they would have to be paid eventually to the person decided to be entitled to them. After the above settlement the rents continued to be collected as above, and the person collecting them rendered accounts to Mr. Watts, and from time to time paid him the sums due, after deducting outgoings, which he received as solicitor acting for the administratrix. The sums so received were less than his bill of costs incurred as solicitor for the administratrix. In February, 1925, the Borough Council, acting under Section 3 of the Housing Act, 1925 (we give the references to the consolidating Act although the proceedings were actually taken under the Housing Act, 1919), served notices on Mr. Watts as "owner" that some of the houses were not fit for human habitation, requiring certain works to be executed. This notice not being complied with, they subsequently took summary proceedings, these proceedings being taken against him as an "owner." The Housing Act in Section 3, Sub-section (10) defines the word "owner" by reference to the "Public Health Acts" for the purpose of this section. In the corresponding section in the Act of 1919 the reference is to the Public Health Act, 1875, and Section 4 of that Act defines the "owner" as "the person for the time being receiving the rack-rent of the lands or premises in connection with which the word is used, whether on his own account or as agent or trustee for any other person . . ." The magistrate reluctantly held that the appellant was the "owner," and made an order for payment of the expenses, and a Divisional Court affirmed this decision. On the words of the definition it appears that the decision could hardly be otherwise. An attempt was made to make a point that the appellant did not collect the rents, but the Court pointed out he "received" them under the section. It was said in the judgment that it had been said in argument that to construe that definition as rendering a person, who was not the owner in the ordinary sense, liable as owner, might work injustice in certain cases, but the Court said that although it might do so, it did not appear why it should, because the person deemed to be the owner under the Statute must always have a remedy over against the true owner. That may be true in a sense, but supposing the real owner is not able to meet the claim, what then? Presumably execution would levy against the statutory owner under the magistrate's order, and he might not be able to recover the whole sum as against the true owner.

Under the Housing Act the local authority has another remedy under Section 3, Sub-section (5), and can enforce the charge as against the premises. See as to this our note on Paddington Borough Council *v.* Finucane, June 22, 1928, and if they cannot recover from the statutory owner they can resort to this remedy, as was done in that case, but the statutory owner cannot compel them to do so, and if he is a man of substance he may have been compelled to pay under the magistrates' order by execution being levied.

The case appears to raise a point of great importance to professional people who are acting for others, and where rents have to be collected it would appear to be the only safe course for arrangements to be made that the collector shall be employed not by the agent but by the principal, and the rents be paid into an account in the name or names of the principal, or that full security should be taken from the principal by the agent before the latter acts as a receiver of the rents.

BUILDERS' FOREMEN AND CLERKS OF WORKS

Annual Dinner.

THE annual dinner of the London Association of Builders' Foremen and Clerks of Works was held last Saturday at the Hotel Cecil. Mr. S. Courtney presided.

In proposing the toast of "The London Association of Builders' Foremen and Clerks of Works," the Chairman said it was an association of men with divergent views when engaged in carrying out their duties, but uniting for the betterment of their work. Building to-day was a more strenuous, exacting and scientific craft than it had ever been before. Greater speed in construction called for closer co-operation of all engaged in it, from architect down to workman, and this greater strain took its toll. The Association had done splendid work with its Pension Fund; it was "up to" those present to see that the good work went on unhampered. There were now twenty-two pensioners, seven men and fifteen women—widows of former members—all of whom, except for the State's Old Age Pension, would have no other income.

In replying to the toast, the President of the Association (Mr. E. J. Wheeler) said the Association covered both builders' foremen and clerks of works, between whom from time immemorial there had been few differences of opinion. A good general foreman was a good clerk of works, and a good clerk of works was a good foreman or assistant to the foreman. Where you had two on the job there was every probability of satisfactory results for everybody concerned. The Association was jealous of its membership, and exercised a close scrutiny that ability should be the only qualification for entry.

Mr. J. Ames, who proposed the toast of "The Architects and Surveyors," said it always seemed to him that the architect's profession gave the opportunity to lead the country in thought and aspiration. There was no profession in the world equal to that of the architects and surveyors. But without builders' foremen and clerks of works the ideas of the architect could not be carried out.

Mr. C. E. Elcock and Mr. J. M. Theobald replied.

Mr. W. Evans, who proposed the toast of "The Builders," said building was originally an instinct with creatures that were on the planet before man appeared. Since those times building had developed into an industry and an art. We could not but feel a thrill of pride to-day when we read of works like the hanging gardens of Babylon or the temples of Greece and Rome. The builders of to-day had a noble heritage and a noble tradition to carry forward.

Mr. R. L. Roberts (President L.M.B.A.) replied.

In the course of the evening, Mr. G. W. Holt (President-elect of the Association) presented the Chairman with a certificate making him an honorary life member of the Association.

The collection made on behalf of the Pension Fund amounted to £210.

NEW BUILDINGS IN LONDON

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned.

Barnes.—HALL.—Plans have been prepared by Messrs. Seth-Smith and Monro, 46, Lincoln's Inn-fields, W.C.2, for a public hall, which is to be erected in Torwood-road and Crestway, S.W. Accommodation will be provided for about 200 persons.

Bourne Hill.—CHURCH.—A new Wesleyan church, to provide seating for 650 people, is to be erected on Bourne-hill, N.13. The plans have been prepared by Messrs. Arthur Brocklehurst and Co., 10, Norfolk-street, Manchester.

Bouverie-street.—REBUILDING.—The proprietors of "Punch" have decided to rebuild and enlarge their publishing and editorial offices at No. 10. Plans have been prepared by Messrs. Thompson and Walford, Leadenhall-buildings, 1, Leadenhall-street, E.C.3.

Brixton. — GARAGES. — Messrs. Bonner & Gibbs, architects, have designed garages at the rear of Nos. 258-272, Brixton-hill.

Burnt Oak.—PRESBYTERY.—Mr. T. H. B. Scott, architect, 11, Finsbury-square, E.C., has prepared plans for a presbytery at the Catholic Church, Thirleby-road, Burnt Oak.

Cricklewood. — OFFICES. — The London General Omnibus Co. have placed a contract with Messrs. John Laing & Co., Ltd., Mill Hill, N.W., for the erection of new divisional offices. The plans have been prepared by Mr. Stanley A. Heaps, L.R.I.B.A., architect to the company.

Dean-street.—ADDITIONS.—A large corner site has been cleared of old buildings by Messrs. H. Sabey & Co., Ltd., Paddington Basin, W., preparatory to the erection of further accommodation for the London Lock Hospital. Messrs. A Saxon Snell & Phillips, 9, Bentinck-street, Manchester-square, W.1, are the architects.

Deptford.—REBUILDING.—Messrs. Truman, Hanbury, Buxton and Co., Ltd., Spitalfields, E.1, have submitted to the local council plans which have been passed for the rebuilding of the "Black Horse" public-house in Evelyn-street, Deptford, S.E.

Deptford.—SCHOOL.—Messrs. G. Parker and Sons, Ltd., 124, Sumner-road, S.E.15, are the builders for the new Aske's Hatcham Boys' School.

Ealing Common. — REBUILDING. — Ealing Common Station, on the District Railway, is shortly to be demolished and rebuilt on up-to-date lines. It will be of Portland stone, surmounted with a double clerestory structure of steel-framing and glazing. The station will have a frontage of 60 ft., and three new shops will be built adjoining it. The booking-hall will be octagonal in shape and have a total area of 1,800 square ft. A further improvement will be the widening of the stairways to both platforms.

Edgware-road.—SHOPS.—A large site, at present occupied by shops, etc., near the Marble Arch, has been acquired by the Marcus Estates, Ltd., 9, New Bridge-street, E.C.4, for shops and flats.

Eltham.—HOUSES.—Plans have been prepared for six almshouses, at Eltham, S.E., by Mr. W. H. Godfrey, architect, 18, Queen Anne's-gate, S.W.1, for the trustees of the Philpot's Almshouses.

Euston-road.—PREMISES.—It is proposed to build a new block of business premises on the site of Nos. 303-305. The agents for the building owner are Messrs. List, Dann & Longworth, 35, Upper Baker-street, N.W.1.

Golders Green.—BANK.—A branch bank, with flats above, is to be erected at the junction of Finchley-road with Hayes-crescent, N.W.10, for the National Provincial Bank, Ltd. The builders are Messrs. O. Diplock & Son, Clock-chambers, London-road, Enfield. The architect is Mr. Herbert A. Welch, F.R.I.B.A., 7, New-square, Lincoln's Inn, W.C.

Hammersmith.—PREMISES.—Messrs. Trevor & Morris, surveyors, Hanover-street, W.1, have sold the Elm House estate, at the corner of Hamersmith-road and Brook Green, W., to Mr. Maggs, who intends to develop the property by the erection for business premises.

Hampstead.—FLATS.—Six large blocks of flats are to be erected in Emmott-close, on the Hampstead Garden Suburb, at a cost of approximately £30,000. The contract has been placed with Messrs. Cropley Bros., Ltd., Church-road, Epsom. The plans have been prepared by Messrs. Hendry & Schooling, FF.R.I.B.A., 6, Bedford-row, W.C.1.

Hendon.—EXTENSIONS.—Messrs. A. Garstin and Co. have made application to the Hendon Urban District Council for extensions to factory premises on the south-east side of Colindale-avenue, Hendon.

Hickman's Folly.—HOUSE.—Plans for the new club-house at the corner of Abbey-street and George-row, S.E.1, have been prepared, on behalf of the Time and Talents Girls' Club, by Messrs. Knapp-Fisher, Powell & Russell, 4a, Lower Belgrave-street, S.W.1.

Holborn.—PREMISES.—The London County Council has received an application from the Trussed Concrete Steel Co., Ltd., for erection of a building at 6a, Ridgmount-street, Holborn.

Kentish Town. — REBUILDING. — Messrs. E. A. Roome & Co., Ltd., of Hackney, are carrying out the pulling down and rebuilding of "The Tally Ho" public-house, Kentish Town, N.W.5, for Messrs. Watney, Combe, Reid & Co., Ltd., under the supervision of Mr. G. G. Macfarlane, A.R.I.B.A., the company's architect.

Lambeth.—BUILDING.—Mr. Ellis Marsland, district surveyor has submitted to the Lambeth Borough Council plans for a building on the site of Nos. 17 and 19, Stannary-street. The application has been approved.

Lambeth.—PREMISES.—Messrs. Yates, Cook & Darbyshire, architects, 43, Great Marlborough-street, W.1. have prepared plans for a building upon the site of Nos. 344-348, South Lambeth-road, and 252a, Clapham-road.

Millbank.—BUILDING.—Plans are in preparation for a proposed second building in Millbank, Westminster, for Imperial Chemical Industries, Ltd. The site will be on the opposite side of Horseferry-road, extending along Millbank to the Grosvenor Ice Rink. It will have a frontage of about 600 ft. The plans are by Sir Frank Baines, F.R.I.B.A.

Oxford-street. — SHOPS. — Messrs. Hillier, Parker, May & Rowden have concluded negotiations for the sale of the site of Nos. 73-77, Oxford-street, 6-8, Dean-street, and No. 7, Soho-square, W.1. The present buildings are to be pulled down and a large block of shops erected. The architect is Mr. Gordon Jeeves, 16, Hanover-square, W.1.

Queen Victoria-street.—REMODELLING.—The reconstruction of the frontage of Mansion House Station (District Railway) which is now complete, is to be followed immediately by improvements to the booking hall which will increase the traffic circulating area by one-third. The booking office is to be demolished and the site utilised for a cloakroom and an office. A further improvement will be the construction of a new entrance to the subway leading to the west-bound platform.

St. Marylebone.—PREMISES.—Messrs. T. P. Bennett & Son, F.R.I.B.A., 41, Bedford-row, W.C.1, are the architects for a block of premises to be erected upon a site abutting upon Finchley-road, Grove End-road, Waverley-place and Finchley-place, St. Marylebone.

St. Pancras.—REBUILDING.—Messrs. Whitbread & Co., Ltd., brewers, have decided to carry out the rebuilding and improvement of their "Anchor" licensed premises in Stibbington-street, N.W.1. The plans have been prepared by Mr. A. R. Mayrton, F.R.I.B.A., 49, Chiswell-street, E.C.1.

Shoreditch. — PREMISES. — The London County Council recommend that the site of 58-63, Shoreditch High-street, having an area of about 14,800 square ft. with frontages to Shoreditch High-street and Bethnal Green-road, be let on building lease to Mr. C. W. Shearley-Sanders.

Stockwell-road.—BUILDING.—The Power Construction Co., Ltd., are to erect premises at No. 103, Stockwell-road, S.W.

Twickenham.—BANK.—The tender submitted by Messrs. Walter Lawrence & Son, Ltd., Sun-street, Finsbury-square, E.C.2, has been accepted for the provision of new branch premises in King-street and Church-street for the directors of Lloyds Bank, Ltd. The plans have been prepared by Messrs. Hall-Jones & Dewhurst, Parliament-mansions, Victoria-street, S.W.1.

Vincent-street.—HOUSES.—Sir Edwin Lutyens, R.A., F.R.I.B.A., 17, Queen Anne's-gate, Westminster, S.W.1, has prepared plans for the Duke of Westminster's Trustees and the Westminster City Council for the erection of 604 tenements, 60 of which will be on the south side of Vincent-street, S.W.1.

Westminster.—RESTORATION.—The work of restoring the fabric of St. John's Church, Smith-square, S.W.1, referred to in our last week's issue, will be carried out by Messrs. John Mowlem & Co., Ltd., Ebury Bridge, S.W.1. The architect is Mr. C. J. Blomfield, F.R.I.B.A., 13, Ashburn-gardens, S.W.7.

Whitechapel.—ADDITIONS.—Messrs. W. Gilbee Scott and B. W. H. Scott have submitted application to the London County Council for erection of an additional story on a building at the premises of Godfrey Phillips, Ltd., Corbet-place, Whitechapel, E.

Woolwich.—ADDITIONS.—Mr. Nowell Parr, F.R.I.B.A., of 42, Cranley-gardens, S.W.7, has prepared plans, on behalf of Messrs. Style and Winch, Ltd., for alterations and additions to the "Army" public-house, Artillery-place, Woolwich.

CONTROL IN BUILDING DESIGN

IN the course of an address to members of West Country branches of the Surveyors' Institution at Bristol, Mr. F. A. S. Goodbody, F.S.I., F.A.I., discussed the question of control in the design of buildings. The prohibition of houses unless designed by a competent architect, involved, he said, the definition of the words "competent architect." This appeared to be an almost insoluble difficulty, and he did not think the general public would be better off than at present, and the builder would be worse off by the fees which he would have to pay whether he liked it or not. The man of limited means would tend to be frightened away from building altogether. The proposal to set local councils up as committees of taste to decide whether a design was artistic or not could only appear ludicrous to anyone who knew the type of worthy gentlemen who constituted those councils, especially in rural districts. His own opinion was that the design of buildings was a matter of secondary importance provided those other important conditions were fulfilled. The lay-out must be considered on a large scale, and it was desirable that the estates to be developed should be as large as possible having regard to the requirements of the district. Long straight building lines should be discouraged. He would like to see the great municipalities spending a few hundred pounds on competitions for designs of different classes of small houses, say, up to £1,000 in value, suitable to the requirements of their inhabitants, and he would offer for the consideration of the profession the proposal that they should minister to the artistic health of the community in the same way as doctors ministered to the physical health by working at greatly reduced charges for the poorer people who could not afford to pay full fees.

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aldershot	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Alfreton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Alnwick	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashford Kent	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ashington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aylesbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Aylsham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Banbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnstaple	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Basingstoke	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bradford-on-Avon	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Braintree	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bridlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bromsgrove	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bromyard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bungay	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Buxton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Canterbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Carlisle	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chorley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cirencester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Clacton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cranbrook	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Deal	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Denbigh	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Devizes	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dewsbury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dorchester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dorking	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Dovercourt	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Driffield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Droitwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E. Glam. (Mon. Val.)	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ely	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Exeter	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Exmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Fakenham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Felixstowe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Frome	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Glossop	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Gosport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harpenden	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hatfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Hednesford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Herne Bay	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Holt	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hunstanton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Huntingdon	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Isle of Wight	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
King's Lynn	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leighton-Buzzard	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Littlehampton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Liverpool	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Llandudno	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London:								
12 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
12-15 m. radius	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lowestoft	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Macclesfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Malvern	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Margate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Market Harb'rough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Matlock	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Melton Constable	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Melton Mowbray	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Merthyr Tydfil	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newark	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Newbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-ur-Lyme	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
New Forest	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Nuneaton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Paignton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Peterborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Pontypridd	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ramsgate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Redcar	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Redditch	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Reigate	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Retford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ripon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Saffron Walden	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sawbridgeworth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Saxmundham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sevenoaks	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sittingbourne	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southend-on-Sea	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stevenage	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stowmarket	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Stratford-on-Avon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swaffham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Tamworth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Thetford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Torquay	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Totnes	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0½
Trowbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Uttoxeter	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wallsend	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warminster	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wells (Norfolk)	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Welwyn Gar. City	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Weston-sup.-Mare	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Weymouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Whitby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Winchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wisbech	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Woodbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worthing	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wrexham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wroxham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Wymondham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

For rates of wages in the Building Trade in Scotland, see page 958

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect, A.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc

DECEMBER 10.

Brookwood.—Heating and Lighting.—(1) Installation of heating and domestic hot water apparatus and fire mains; (2) electric wiring and fittings for the Lunatic Asylums Visiting Committee of the Surrey C.C. E. Lancaster Burne, 28, Victoria-st., Westminster, S.W.1. Dep. £3 3s.

Carlisle.—Painting.—Also renovation of board room and annexes at Fusehill Institution, for B.G. J. Gorton, clerk, 7, Victoria-place.

Coseley.—Houses, etc.—34 on Highfields-rd. and Old End housing sites, for U.D.C. G. E. Mitchell, E. and S. Dep. £2 2s.

Depwade.—Cottages.—Four cottages at Earsham, for R.D.C. F. H. Bowden, Long Stratton. Dep. £1.

Dublin.—Additions.—Also alterations to kitchen quarters, male block, Crooksling Sanatorium, for T.C. City Architect.

Fridaybridge.—House.—Teacher's house, for Isle of Ely E.C. C.S.

Glasgow.—Lighting.—Electric lighting installation at Scotstoun—area No. 2 (tenement section), intermediate type, Gairbraid-av., re-housing scheme, for T.C. General Manager, 75, Waterloo-st., Glasgow, C.2.

Glasgow.—Shed.—Single-story goods shed on East Quay, Dock No. 1, Shieldhall, Glasgow, 1,989 ft. in length by 100 ft. in width, for Clyde Navigation Trust. A. M. Fulton, Chief Assistant Engineer to Trustees, 16, Robertson-st., Glasgow, C.2. Dep. £3 3s.

Hendon.—School.—Contractors willing to tender for proposed school to accommodate 1,160 children at Hendon, for the U.D.C., should submit applications and particulars of similar work carried out by them to James Anderson, Sec., Edu. Offices, The Burroughs, Hendon, N.W.4.

Hove.—Painting.—Internal painting, distempering, etc., at Hove Sanatorium, Portslade, for T.C. B.S.

Liverpool.—Pavilion.—Sports pavilion, etc., at elementary schools playing field, Townsend-lane, Clubmoor, for T.C. Land Steward and Surveyor. Dep. £2 2s.

Liverpool.—School.—Elementary school at Rauworth-sq., Norris-green, for T.C. Briggs & Thornley, F.R.I.B.A., 612, Royal Liver-buildings. Dep. £10 10s

London.—Alterations and Additions.—To the Wholesale Market, Brentford, for the Brentford and Chiswick U.D.C. Edward Willis, Engineer and Surveyor, Town Hall, Chiswick, W.4. Dep. £1 1s.

Macclesfield.—Re-roofing.—Of sheds to present Cattle Auction, Waters-green, for T.C. E. Hamson, B.S.

Salford.—Houses.—96, at Gerald-rd., Pendleton, for T.C. City Engineer. Dep. £2 2s.

Torquay.—Additions.—Also alterations at concert hall, Princess Pier, for T.C. B.E. Dep. £1 1s.

West Bromwich.—Houses.—Construction of roads and sewers on land adjoining Oak-lane; also for erection of 41 type "A" non-parlour 3-bedroom houses, and 10 type "A" non-parlour 2-bedroom houses, for C.B. A. D. Greatorex, B.S.

Whitby.—Additions.—Alterations and additions to electricity showrooms in Flower-gate, for U.D.C. J. R. Seward, E. and S. Dep. £2 2s.

Willesden.—Flats.—Erection of 5 blocks (20 in all) upon land fronting Pound-lane, for the Willesden District Council. F. Wilkinson, Engineer to the Council, Town Hall, Dyne-rd., Kilburn, N.W.6.

Winchester.—Repairs.—At several elementary schools, for E.C. T. Holt, Clerk to Education Authority.

Woodhurst (Hunts).—Houses.—4 at Woodhurst, for St. Ives (Hunts) R.D.C. W. A. Lee, architect, 4, Market-hill, Huntingdon.

DECEMBER 11.

Daventry.—Houses—8, at Braunston-rd., for T.C. J. B. Williams, architect, The Moot Hall.

Edinburgh.—Installation.—Electrical installation work in connection with the erection of Leith Academy New Secondary school, for T.C. Reid & Forbes, architect, 7, Ainslie-place.

Lisburn.—Demolition.—Also removal of buildings at District Hospital, Hillsborough-rd., Lisburn, known as (1) The Old Cholera Hospital, and (2) part of Old Female Infirmary, for B.G. James Hunter, B.E., architect.

Liverpool.—Lighting.—Electric light installation at Old Swan washhouse, and electric light fittings at four plunge baths, for T.C. Walter Moon, T.C

Romford.—Telephone Exchange.—Erection of, at Ingrebourne, Harold Wood, Romford, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Stockton-on-Tees.—Garage.—Omnibus garage in Bridge-rd. and Boathouse-lane, for T.C. J. P. Wakeford, B.E. Dep. £2 2s.

Stockton-on-Tees.—School.—Erection of Frederick Nattrass Council school at Norton, for T.C. T. W. T. Richardson, F.R.I.B.A., architect, 57, High-st.

Wellingborough.—Houses.—26, on Finedon-rd., for U.D.C. E. and S. Dep. £1 1s.

DECEMBER 12.

Ashford.—Houses.—60 non-parlour type at Beaverlane, for U.D.C. W. Bowles, architect, Elwick-rd. Dep. £2 2s.

Bromley, Kent.—Electrical Wiring.—Of 91, houses to be erected on the Southborough Housing site, for the Bromley Borough Council. Harold Cliffe, B.E., Municipal Offices, Bromley. Dep. £1 1s.

Burton-upon-Trent.—Home.—Nurses' home at Poor Law Institution, Belvedere-rd., for B.G. R. S. Litherland, L.R.I.B.A., 10, High-st. Dep. £5.

Enniskillen.—House.—At Alexandra-terrace, for R. G. Clingen, Church-st. J. Donnelly, architect, Enniskillen.

Erpingham.—Cottages.—2 at Sustead; 2 at Baconsthorpe; 2 at Knapton; 4 at Antingham; 4 at Briston; 2 at Roughton; 4 at Gimingham, for R.D.C. Buckingham & Berry, 43a, Prince of Wales'-rd., Norwich. Dep. £1 1s.

Farnham.—Store.—Linen store at Infirmary, for B.G. A. J. Stedman, F.R.I.B.A., South-st.

Hemsworth.—Bathroom.—Also alterations of lavatories at casual wards, Rotherham-rd., for B.G. W. T. Lynam, Market-chambers, Hemsworth.

Hull.—Fencing.—700 yds. of arris pale fence, 6-ft. 6-in. high, at Costello Playing Fields, Pickering-rd., for T.C. T. Thomas, City E.

Leix.—Additions.—Also alterations at Ballyfin House, Mountrath, for Patrician Bros. T. J. Cullen, F.R.I.A.I., 25, Suffolk-st., Dublin. Dep. £3 3s.

Newcastle-on-Tyne.—Garage.—Erection of, at Sorting Office, Forth-st., Newcastle-on-Tyne, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Norwich.—Houses.—100 at Lakenham estate, for T.C. J. S. Bullough, City E.

Nottingham.—Painting.—Internal cleaning and painting at following schools: All Saints' Senior Council school, Forest-rd. West; Forest Fields Council school, Bradgate-rd.; Huntingdon-st. Council school; Leen Side Council school; Shelton-st. Counci school, for E.C. A. H. Whipple, Director of Education, Education Office, South Parade. Dep. £1.

Rochdale.—Convenience.—Gentlemen's convenience in Queen-st., for C.B. B.S.

Sheffield.—Heating.—Installation of filtration, aeration, heating and circulating plant at Park baths, for T.C. W. Geo. Davies, F.R.I.B.A., City Architect. Dep. £2.

DECEMBER 13.

Crumlin.—Improvements.—To Crumlin P.E.S. teachers' residence, for Antrim Regional E.C. James L. Clark, Secretary, Antrim.

Lancaster.—Offices.—An office and residence, Chapel-st., for T. Ireland & Sons, Ltd. R. W. Jackson, architect and surveyor, 43, Church-st.

Leyton.—Cottage.—Storekeeper's cottage at Council's Highways Depot, Ive Farm, Church-rd., Leyton, E.10, for T.C. A. P. Howell, B.E. Dep. £5.

Leyton.—Shelter.—Also dressing rooms at school playing fields, Ive Farm, for T.C. A. P. Howell, B.E. Dep. £5.

Manchester.—Sub-station.—To be known as Denton South, for T.C. H. C. Lamb, Chief Engineer and Manager, Electricity Department. Dep. £1 1s.

Offaly.—School.—New National school at Croghan, Rhode. Rev. T. Norris, P.P.

Tarleton.—School.—New Council school, for Lancashire E.C. Stephen Wilkinson, F.R.I.B.A., County Architect, 16, Ribblesdale-place, Preston. Dep. £2.

DECEMBER 14.

Blackpool.—Building.—Construction of conveniences and bandstand in Stanley-park, for C.B. Thomas H. Mawson & Son, architects, High-st. House, Lancaster. Dep. £1 1s.

Erith.—Extensions.—Of certain temporary extensions at Council Offices, Bexley-rd., for U.D.C. S. Dep. £2 2s.

Liverpool.—Building.—Canteen building, Fazakerley Hospital, for T.C. Land Steward and Surveyor.

Reigate.—Houses.—12 at Kingswood and 4 flats at Nutfield, for R.D.C. W. J. Hatton, surveyor. Dep. £3 3s.

DECEMBER 15.

Bradford.—Recreation Room.—For women at Grassington Sanatorium, for Corporation. City Architect.

Hendon.—Levelling, etc.—Of The Hyde, Council school playing field, for the Hendon U.D.C. Surveyor, Town Hall, Hendon.

Kirkcaldy.—Houses.—Block of 2 three-roomed houses at Auchmuir Bridge, Auchtertool, Kinglassie and Thornton, for Kirkcaldy D.C. W. Williamson, architect, Kirkcaldy Dep. £1 1s.

Mitford and Launditch.—Cottages.—Six cottages at North Elmham, for R.D.C. W. J. Barton, clerk. Dep. £1 1s.

DECEMBER 17.

Chertsey.—Alterations.—Of buildings, erection of cowshed, boundary wall and other works at Woburn Hill, Addlestone, for U.D.C. F. W. Greig. Dep. £2 2s.

Henstead.—Cottages.—Pair at Surlingham, for R.D.C. R. N. Jones, clerk.

Hindley.—Reconstructing.—General Offices, 11, King-st., for Hindley Industrial Co-operative Society, Ltd. Secretary.

Leicester.—Public Abattoir.—In Aylestone-rd., for T.C. A. Herbert, A.R.I.B.A., 18, Friar-lane. Dep. £2 2s.

Reigate.—Houses.—6 houses and 4 flats in Rectory-lane, Buckland, for R.D.C. W. J. Hatton, S.

Rotherham.—Houses.—12, at Laughton, and construction of road, for R.D.C. C. O. Rawstron, E. and S. Dep. £2 2s.

Windsor.—Additions.—To infirm wards (female) of Poor Law Institution, Old Windsor, for B.C. J. E. Gale, clerk, 16, Sheet-st. Dep. £1 1s.

DECEMBER 18.

Epsom.—Non-Parlour Type Houses.—Erection of 6 pairs at Hook-rd., for the Epsom U.D.C. A. C. Williams & Pettett, Reid's-building, Ashley-rd., Epsom. Dep. £2 2s.

Ireland.—Building.—For (1) enlarging Ballinamore National school, Fintown, Co. Donegal; (2) erection of St. Patrick's Convent National school, Carndonagh, Co. Donegal; (3) reconstruction of a building for Garda Siochana at Dunkineely, Co. Donegal; (4) reconstruction of a building for the Garda Siochana at Rochfortbridge, Co. Westmeath; (5) erection of a National school at Murrisk, Co. Mayo; (6) erection of a National school at Church View, Co. Roscommon; (7) improvements to Cloonteagh National school, Co. Longford, for Commissioners of Public Works. T. Cassedy, Secretary, Office of Public Works, Dublin. Dep. £1 each.

Willesden.—Convenience.—Conversion of an existing building in Willesden-lane, Kilburn, into public convenience, for U.D.C. F. Wilkinson, E.

DECEMBER 19.

Dagenham.—Fencing.—Supply and erection of about 515 yds. lin. unclimbable wrought-iron fencing, for U.D.C. A. E. Stickland, Acting E. and S.

London.—Garage.—New motor garage, Council's Depot, Knott-st., Deptford, S.E.8, for Deptford B.C. B.E. and S. Dep. £1 1s.

Wath.—Installation.—Of electric lighting at Secondary school, for West Riding E.C. Education Department, County Hall, Wakefield.

DECEMBER 20.

Manchester.—Building.—Dressing accommodation at open-air baths at Heaton-park, for T.C. City Architect. Dep. £1 1s.

Surrey.—Pavilion.—Erection of, in the Memorial Ground, Marlpit-lane, Coulsdon, for the Coulsdon and Purley U.D.C. Gilbert A. Ballard, O.B.E., A.M.I.C.E., Council Offices, 69, Brighton-rd., Purley. Dep. £2 2s.

DECEMBER 21.

Woking.—Cottages.—19 pairs, at Old Woking, for U.D.C. G. J. Wooldridge, S

DECEMBER 22.

Drogheda.—Heating.—Remodelling and heating of St. Mary's Boys' National Schools, Drogheda J. Nulty, P.P., St. Mary.

DECEMBER 31.

East Sussex.—New Secondary School.—Erection of, for 200 boys, at Lewes, in the County of East Sussex, for the East Sussex C.C. E. A. Verger, L.R.I.B.A., C.A., County Architect's Office, 175 High-st., Lewes. Dep. £3 3s.

Stratford-upon-Avon.—Houses.—100, for T.C. F. W. Jones, B.S.

JANUARY 8, 1929.

Gosforth.—Additions.—To Council-chambers, High-st., for U.D.C. G. Nelson, E. and S.

Ipswich.—Houses.—140 on Gainsborough-lane and London-rd. sites, for C.B. E. McLauchlan, B.S and Water Engineer. Dep. £2 2s.

NO DATE.

Crofton.—Alterations.—To water closets at Council school, for West Riding E.C. P. Beaumont, W.R. Education Offices, 8, St. John's North Wakefield.

Prestwich.—Walls.—Tiling of walls at County Mental hospital, Prestwich, Manchester. A. B. Dowling, Clerk and Steward.

Tanygrisiau.—Improvements.—New culverts and carrying out certain other work at Tanygrisiau school-master's house, for Merioneth E.C. A. M. Howard-Jones, L.R.I.B.A., County Offices, Dolgelley

MATERIALS, etc.

DECEMBER 11.

Leeds.—Setts.—1,000 tons granite paving setts for T.C. R. L. Horsfield, General Manager and Engineer, Tramway Department.

Steyning.—Painter's Materials.—For B.G. A. Flowers, clerk.

DECEMBER 13.

Ashford.—Builders' Materials.—For West London school district. F. G. Beeching, clerk to Managers.

Durham.—Goods.—For (*a*) making and delivering cast-iron pipes from 2 in. to 6 in. diameter; (*b*) making and delivering special small castings, for County Water Board. H. Robinson, engineer, Bishop Auckland.

DECEMBER 15.

West Riding.—Road Materials.—For C.C. West Riding Surveyor, County Hall, Wakefield.

DECEMBER 17.

Derbyshire.—Road Materials.—For C.C. J. W. Horton, C.S.

DECEMBER 18.

Wealdstone. — Tarmacadam. — For U.D.C. H. Walker, S.

DECEMBER 19.

Plymouth.—Pipes.—3,300 yds. of 24-in. internal diameter cast-iron gas main pipes, together with necessary valves, syphons and specials, for T.C. F. Blackburn, Engineer and Manager, Gas Works, Devonport.

DECEMBER 20.

East Suffolk.—Road Materials.—For C.C. W. Jervis, C.S., Ipswich.

Montgomery.—Road Materials.—For C.C. T. L. Oliver, C.S., Welshpool.

DECEMBER 29.

Berkshire.—Road Materials.—For C.C. Lt.-Col. J. F. Hawkins, C.S., Reading.

JANUARY 7, 1929.

Norfolk.—Road Materials.—For C.C. S. H. Warren, C.S.

JANUARY 22.

South Africa.—Pipes.—Steel and cast-iron pipes and cast-iron fittings, etc., for Grahamstown T.C. Department of Overseas Trade, 35, Old Queen-st., London, S.W.1. (Ref. A.X. 7182.)

NO DATE.

Failsworth.—Builder's Materials.—For U.D.C. S.

ENGINEERING, IRON AND STEEL

DECEMBER 10.

Bedford.—Reservoirs.—Construction of three storage reservoirs and two open sand filters, with necessary pipe connections, for T.C. J. Taylor & Sons, engineers, Caxton House, Westminster, S.W.1. Dep. £5.

Dumfries.—Water Supply.—Construction of a reservoir of about 340,000 gallons capacity, with earthen embankment and puddle wall, and the supplying, laying, and jointing of about 1,255 lin. yds. of 4-in. diameter cast-iron pipes and relative accessory works, at Thornhill, for C.C. W. C. Easton, chartered civil engineer, 183, West George-st., Glasgow. Dep. £2 2s.

Letchworth.—Overbridge.—Over L. and N.E. Rly., Station-pl., for U.D.C. G. Brown, clerk. Dep. £2 2s.

Richmond (Surrey).—Extension.—For (1) Extension of engine-room, construction of pump well, delivery pipes, chambers, and other works; (2) pumping machinery and accessories, at Main Drainage Works, Mortlake, for Richmond Main Sewerage Board. W. Fairley, Engineer, Parliament-mansions, Westminster, S.W.1. Dep. £3 3s

DECEMBER 12.

London.—Steelwork.—242 tons structural steelwork, for the Madras and Southern Mahratta Railway Co., Ltd. Director, 25, Buckingham Palace-rd., Westminster, S.W.1.

Twickenham.—Bridge.—Making-up approach rd. to and erection of reinforced concrete bridge over River Crane at Meadway, for T.C. B.E. and S. Dep. £2 2s.

DECEMBER 13.

Campbeltown.—Repairs.—On north-western extension of harbour, consisting of 2,000 cu. ft. of greenheart wallings and struts, 1,000 cu. ft. of reinforced concrete piling, etc., 300 cu. yds. of concrete revetment work, 1,000 cu. yds. of excavations, besides other contingent works, for T.C. J. B. Brodie, chartered civil engineer, 141, West George-st., Glasgow. Dep. £2 2s.

DECEMBER 14.

Dublin.—Steelwork.—370 tons of steelwork for bridges, consisting chiefly of plate girders, pressed troughing, and broad flange beams, for Gt. Southern Rlys. J. F. Sides, Chief Engineer, Broadstone Station, Dublin, C.16.

DECEMBER 17.

Broadstairs and St. Peter's.—Drainage.—Construction of surface water sewers, 9-in., 12-in., 15-in., 18-in., 24-in. and 39-in. in diameter, together with short length of sea outfall, and also manholes and other appurtenant work, for U.D.C. G. M. C. Taylor, engineer, Caxton House, Westminster, S.W.1. Dep. £5.

Broadstairs and St. Peter's.—Drainage.—4,600 yds. of stoneware sewers of 9-in. and 12-in. in diameter, and about 2,330 yds. of concrete tube sewers of 18-in., 24-in., 27-in. and 30-in. in diameter, together with manholes, ventilating shafts and other appurtenant works, for U.D.C. G. M. C. Taylor, engineer, Caxton House, Westminster, S.W.1. Dep. £5.

Dublin.—Ironwork.—Cast-iron work, for Gt. Southern Rly. H. S. Coe, Secretary, Kingsbridge Station.

Stoke-on-Trent.—Water Supply.—Rearrangement of the cold-water supply system at Bucknall Infectious Diseases Hospital, for Corporation, City Electrical Engineer, St. George's-chambers, Kingsway. Dep. £2.

DECEMBER 20.

Johannesburg.—Bridgework.—Structural bridgework, for South African Rly. and Harbours. Dept. of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref A.X. 7115.)

DECEMBER 21.

Partadown.—Sewers.—18,000 lin. yds. of 6-in., 9-in., 12-in., 15-in., 18-in., 21-in., 24-in. and 27-in. pipe sewers, with necessary manholes, flushing chambers and storm overflows; taking up and relaying certain existing sewers, sewer crossings under railways; and also construction of bacterial sewage purification works and levelling and laying-out of land at outfall at Seagoe, for U.D.C. Taylor & Wallin, engineers, 1, Saville-pl., Newcastle-on-Tyne. Dep. £10.

DECEMBER 31.

Ringwood.—Sewerage.—4 miles of cast-iron and stoneware pipe sewers and manholes, pumping station, settling tanks, and other accessories, for R.D.C. W. C. Easdale, engineer, 1, Victoria-st., S.W.1. Dep. £5.

JANUARY 3, 1929.

Antwerp.—Bridges.—Two reinforced concrete footbridges, for T.C. Dept. of Overseas Trade, 35, Old Queen-st., S.W.1. (A.X. 7152.)

FEBRUARY 28.

Siam.—Superstructures.—Steel bridge superstructures, for Siamese State Railway. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 7098.)

ROAD, SEWERAGE, AND WATER WORKS

DECEMBER 10.

Hampton.—Sewers.—Construction of C.I. soil and stoneware surface water sewers, and road works on Hill Field housing site, Priory-rd., for U.D.C. S. H. Chambers, S.

Hampton and Teddington. — Making-up. — Of Bushy Park-gardens, for U.D.C.s. S. H. Chambers, S., Public Offices, Hampton.

Hendon.—Improvements.—Kerbing, channelling, road widening, surface water drainage and other works in connection with Clitterhouse-lane, for U.D.C. A. O. Knight, E. and S. Dep. £5.

Hertford.—Kerbing.—628 lin. yds. of kerbing, etc., to footpath on north side of Ware-rd., for T.C. B.S. Dep. £2 2s.

Manchester.—Paving.—Sewering, draining, paving (rock asphalt), flagging (artificial flags), etc., Bacup-st., Moston, from Dean-lane to a point 74 yds. in a north-easterly direction, for T.C. H. Dunks, Acting Town Clerk. Dep. £1 1s.

Sittingbourne.—Paving.—For (a) kerbing and paving Avenue of Remembrance; (b) kerbing Chiltona-v.; (c) supply and erection of about 94 yds. run of oak fencing, depot, Bell-rd., and (d) building piers and erection of entrance gates to depot, Bell-rd., for U.D.C. M. W. Lashmar, S.

DECEMBER 11.

Buxton.—Sewer.—897 yds. of 24-in. and 27-in. concrete tube sewers, and 242 yds. of 15-in. stoneware pipe sewers, together with manholes and other incidental works, for T.C. F. Langley, B.E. and S Dep. £2 2s.

London.—Paving.—Paving and forming roadway and footways of (a) Ashwater-rd., Lee, area about 3,750 yds., and (b) Polsted-rd., Catford, area about 2,800 yds, for T.C. S.

Stoke and Wolstanton.—Mains.—For (i) provision and laying of cast-iron mains and fire hydrants, and (ii) installation of electric fire alarm system and wiring, at Turnhurst-rd. Institution, Chell, near Tunstall, Stoke-on-Trent, for B.G. Edwards & Shaw, consulting engineers, 105, Colmore-row, Birmingham. Dep. £1.

DECEMBER 12.

Bingham.—Sewers.—Laying of approximately 345 yds. lin. of 9-in. sewer with manholes, etc., at Cropwell Bishop, for R.D.C. C. W. Kendrick, Sanitary Surveyor. Dep. 10s.

North Dublin.—Sewer.—Extension to existing public sewer at Killester, on Howth-rd., for R.D.C. Francis P. Russell, engineer, 16, Westmoreland-st., Dublin.

Twickenham.—Making-up.—Of Andover-rd., for T.C. B.E. and S. Dep. £1 1s.

DECEMBER 14.

London.—Making-up.—Portion of Dalgarno-gardens, about 460 ft. in length, for Kensington B.C. B.E. and S.

Tonbridge. — Making-up. — Stonewall-park and Langholm-rds., Langton, Speldhurst. F. Harris, E. and S. Dep. £1 1s.

Tutbury.—Sewer.—Provision, laying and jointing of about 665 lin. yds. of 15-in. cast-iron pipe sewer, construction of manholes and other incidental works, including crossing under the L.M. & S. Railway, in Stretton, near Burton-on-Trent, for R.D.C. Willcox & Raikes, engineers, Stock Exchange-buildings, 33, Great Charles-st., Birmingham. Dept. £2 2s.

DECEMBER 15.

Fareham.—Sewerage.—800 yds. lin. of 4-in. and 6-in. glazed stoneware drains with disconnecting manholes and works incidental thereto, for R.D.C. Lemon & Blizard, engineers, Castle-lane, Southampton. Dep. £2 2s.

Kingsbury.—Fencing.—1,895 yds. of open oak fencing, with necessary gates, for U.D.C. S Dep. £1 1s.

Wirral.—Making-up.—Of Overdale-rd., Willaston, and Oldfield-rd., Heswall, for R.D.C. S. H. Davies, Highways Surveyor. Dep. £1 1s.

DECEMBER 17.

Bootle—Making-up.—Of Bailey-drive, Orrell, the surfacing work to be constructed of proprietary asphaltic or bitumastic carpeting, for C.B. B.E. Dep. £1 1s.

Edmonton.—Making-up.—Cranwich-av., Berkeley-gardens, North-av. and Lansfield-av., for U.D.C. C. Brown, E. and S. Dep. £2 2s.

Gravesend.—Drainage.—Main drainage scheme in part of borough known as "No. 2 Sand Area," including picking up existing house drains and connecting to public sewers, for T.C. F. T. Grant, B.S. and E. Dep. £5.

West Sussex.—Surfacing.—With 2-in. single-coat asphalt of portion of Brighton-Portsmouth main rd. A27, between Offington-corner and Swandean (near Worthing), comprising an approximate area of 17,500 super. yds., for C.C. H. W. Bowen, C.S., Chichester.

Whitstable.—Reconstruction.—Of (a) Northwood-rd. (part of), and (b) Tankerton-rd. (part of), for U.D.C. G. Dunkin, B.Sc., Surveyor and Water Engineer. Dep. £2 2s.

DECEMBER 18.

Colwyn Bay.—Sewers.—For (1) laying of a surface-water sewer in Llandudno-rd. and Dinerth-rd., and (2) laying of a foul sewer in Conway-rd., for U.D.C. W. J. Dunning, E. and S. Dep. £1 1s.

Maldon.—Improvements.—Of Mundon-rd. at north end, for T.C. B.E.

Tottenham.—Making-up.—Of Gloucester-rd., for U.D.C. Engineer.

DECEMBER 19.

Birkenhead.—Asphalt.—Providing and laying mastic asphalt surface in certain streets, for C.B. R. W. Johnston, B.E. and S.

DECEMBER 20.

Beddington and Wallington.—Sewerage.—Construction of about 435 ft. of 9-in. diameter stoneware pipe sewer, together with works, appurtenant thereto, in Mitcham-rd., Croydon, for U.D.C. S. F. R. Carter, E. and S. Dep. £1 1s.

DECEMBER 21.

Plympton St. Mary.—Mains.—Provision and laying of several miles of steel cast-iron water mains, and construction of brick service reservoir at Brixton, for R.D.C. R. Hailsford Worth, engineer, 42, George-st., Plymouth. Dep. £3 3s.

DECEMBER 31.

Staines.—Widening.—Of Walton-lane, Shepperton, including reinforced concrete raft, kerbing, storm water sewers, etc., for R.D.C. D. C. Fidler, E. and S. Dep. £2 2s.

JANUARY 2, 1929.

Clacton.—Making-up.—Of Berkeley-rd., Severn-rd., and Upper Branston-rd., the carriageways to be of concrete, with concrete slab footways, grass verge, and other incidental works, for U.D.C. W. Aiston, S.

JANUARY 4.

Calcutta.—Main.—Supplying and laying in a prepared trench 42-in. steel main for supply of filtered water in Garden Reach, for the Corporation. Constructional Engineer, Water Works Extensions, Central Municipal Office.

NO DATE.

Normanton.—Making-up.—Of Clifton-st., Templar-st., Edward-sq. and back streets, Wakefield-rd. Spencer & Son, surveyors, 24, Basinghall-st., Leeds.

Auction Sales, Tenders, etc.

DECEMBER 11.

***Lambeth.**—Veryard & Yates will sell, without reserve, to clear site, Lambeth-rd., S.E. (corner Pratt-st., adjoining Lost Property Office), useful Building Material (arising from the demolition). Auctioneers, 395, Norwood-rd., S.E.27.

DECEMBER 12.

***Brentford and Chiswick.**—For Sale by Tender. 10-tons Aveling & Porter Steam Road Roller. Edward Willis, M.Inst.C.E., Brentford and Chiswick U.D.C., Town Hall, Chiswick.

***Sussex.**—Charles R. Davis & Co., will sell, by order of the Debenture Holders, re Nissen-Petren Houses, Ltd., on the site, Asylum-rd., Haywards Heath, Sussex, Builders' Plant, Sectional Office, Store Shed, etc. Auctioneers, 285, Borough High-st., S.E.1.

DECEMBER 12 and 13.

Sheffield.—Eadon & Lockwood will sell by order of Wm. Silvester, C.A. (of Messrs. J. W. Best & Co., chartered accountants), the Receiver re James Fidler, Ltd., Corporation-st., Sheffield, builders and contractors, loose plant works and fast machinery, also goodwill are for sale privately. Auctioneers, St. James'-st., Sheffield.

DECEMBER 13.

Bournemouth.—Fox & Sons will sell, by direction of Mr. F. H. Cooper Christmas, the Receiver for the Debenture Holders of the Ensbury Park (Bournemouth) Racecourse Company, Ltd., at the St. Peter's Hall, Hinton-rd., Bournemouth, freehold property, The Racecourse, Ensbury Park, about 124 acres. The estate is provided with two large grand stands, racing track, buildings and offices. Auctioneers, 44-50, Old Christchurch-rd., Bournemouth.

London.—Frank G. Bowen, Ltd., will sell by direction of the Senior Official Receiver in Companies Liquidation, in the matter of F. Kinnaird & Co., Ltd., at sale rooms, 62a, Aldersgate-st., E.C.1., plant and stock-in-trade of a builder and contractor, office furniture, etc. Auctioneers as above.

London.—E. J. Westoby will sell, at Cedars Hall, Green-lanes, Winchmore-hill, N.21, Residence, Avondale College, six and half acres of land, about 600 feet frontage to existing roads. Auctioneer, 59, Station-rd., and "The Cedars," Green-lanes, Winchmore-hill, N.21.

Public Appointments

DECEMBER 10.

Battersea.—Works foreman required by the Battersea B.C. to act under the general direction and control of the Borough Engineer and Surveyor. Edwin Austin, T.C., Town Hall, Battersea, S.W.11, endorsed "Works Foreman."

DECEMBER 12.

***Finchley.**—Temporary Town Planning Assistant required by the Finchley U.D.C. Percival T. Harrison, M.Inst.C.E., Engineer and Surveyor, 9, The Hawthorns, Regent's Park-rd., Finchley, N.3. endorsed "Town Planning Assistant."

Southampton.—Temporary Architectural Assistant in the Borough Engineer's (Education) Dept. required by the Southampton Borough Council. Town Clerk's Office, endorsed "Temporary Architectural Assistant."

DECEMBER 13.

Southampton.—Three Grade III. Tracers required by the Southampton C.B. in connection with the prescription of Improvement Lines under the Public Health Act, 1925. W. J. Taylor, City S., The Castle, Winchester, endorsed "Assistant Grade III."

DECEMBER 15.

***Northampton.**—Temporary Second Architectural Assistant, by the Northampton E.C. Alfred Fidler, M.Inst.C.E., B.E. and S. to the E.C., Guildhall, Northampton.

DECEMBER 17.

Wiltshire.—Architectural Assistant required by the Wilts C.C. in the County Architect's Office. W. L. Bown, Clerk of the C.C., County Offices, Trowbridge.

DECEMBER 19.

***Ireland.**—Temporary Assistant Quantity Surveyor required by the Government of Northern Ireland, in the Ministry of Finance. The Secretary (Establishment Division), Ministry of Finance, 15, Donegall-square West, Belfast.

CONTRACTS PLACED

Great Yarmouth.—ADDITIONS.—Messrs. J. Bales & Co., 221, Northgate-street, have secured a contract for alterations and additions to the Gorleston Pier Hotel. Plans have been prepared by Mr. A. Eccleston, architect, c/o Messrs. E. Lacon & Co., Ltd., The Yarmouth Brewery.

Ipswich.—FACTORY.—A large contract for steelwork for a new factory in Nacton-road, for Messrs. Wrinch & Sons, Ltd., engineers, has been placed with Messrs. Boulton & Paul, Ltd., Riverside Works, Norwich. The plans have been prepared by Mr. P. A. Mossay, 25, Dalton-road.

Leeds.—PREMISES.—Messrs. H. J Heinz Co. have secured and are converting premises in Kidacre-street, Leeds, and the contract has been placed with Messrs. W. Nicholson & Son, Prospect Saw Mill, Hunslet, Leeds.

Sevenoaks.—BANK.—New branch offices are to be built in the Market-square for Messrs. Lloyds Bank, Ltd., with provision for a residential manager on the upper floors. The builders are Messrs. A. Tye, Ltd., Tubs Hill. The architect is Mr. T. M. Wilson, F.R.I.B.A., 4, Staple-inn, Holborn, W.C.1.

Worcester.—EXTENSIONS.—The G.W.R. Co. have placed a contract with Messrs. E. C. Jordan & Son, Harrow-road, Newport, Mon., for the extension of the goods warehouse at their Shrub Hill station.

School Building in West Riding.

It has been reported to the West Riding Education Committee at Wakefield that revised plans for the erection of a new secondary school at Harrogate have now been approved and forwarded to the Board of Education, the estimated cost being £65,250. The Board of Education had intimated their approval of the scheme of extensions at the Normanton Grammar School, the cost being estimated at £17,700. The Committee decided to give the necessary notices of their intention to build a new school at Ecclesfield Town, near Sheffield, to accommodate 309 children, at an estimated cost of £11,000; also to provide at the Ecclesfield High Green Council School a woodwork, metalwork and science room, at a cost of £2,900. A scheme was approved for the reorganisation of the schools in the Skelmanthorpe district, involving a new middle school at Skelmanthorpe, to accommodate 470 children, at an estimated cost of £17,000, and revised plans were approved in connection with the new elementary school at Thorne (Goole-road), the building to accommodate 1,000, and to cost, with caretaker's house, £34,000.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians, B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education, M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect, A.

Ashford.—U.D.C. approved estimate of £27,260 in respect of new housing scheme.

Ash-next-Sandwich.—Kent C.C. are to spend £1,350 for 2 houses for members of county police at Chequers-lane.

Bangor.—T.C. urging Down C.C. to proceed with construction of wide new road for motor traffic from Belfast to Bangor.

Barham.—Site of six acres, near Barham railway station, is to be purchased by Kent C.C. for £1,300 as a main road depot.

Bath.—T.C. are to apply to M.H. for sanction to borrow £3,975 for erection of a bridge.—City Engineer reported that G.W.R. Co. were willing to grant lease of ground at corner of North Parade Bridge-rd. to enable the Council to erect a new convenience in place of the one at Pulteney-rd. bridge, and T.C. resolved, that offers be accepted and plans be submitted by Engineer at £200.—Special sub-committee considered sites for central lavatory and cloak room, and recommend that City Engineer be instructed to prepare a scheme for the construction of lavatory for both sexes underneath the Orange-grove.

Becontree.—London C.C. recommend £1,700 in respect of erection of pavilion to provide dressing accommodation at the playing-fields at Becontree.

Beddington and Wallington.—U.D.C. passed plans:—Godalming-av., 8 houses and 2 garages, for W. A. Lee; Stafford-rd., 6 semi-detached houses, with garages, for Humphreys & Allen; Forester's-drive, 6 semi-detached houses, for F. H. Claridge & Son; Queenswood-av., 20 semi-detached houses, for The All-In Houses, Ltd.

Belfast.—B.G. sanctioned expenditure of £20,000 on providing extra accommodation for seventy nurses at Union Workhouse.

Bournemouth.—T.C. passed plans:—Additions, Tollard Royal Hotel, West Hill-rd., A. Rosenberg; additions, The Carlton Hotel, East Cliff-drive, Bournemouth and District Properties Co., Ltd.; 3 houses, Horsa-rd., Midgeley & Hardy, Ltd.; 3 houses, "The Grove," Redhill Park estate, F. Moorman; alterations, premises, Sea- and Christchurch-rds., J. H. Dewhurst, Ltd.; business premises, Westover-rd., Fuller, Ltd.; 7 houses and shops, Charmister-rd., S. G. Ward; addition, The Grange Hotel, Southbourne, Overcliff-drive, The Grange Hotel, Ltd.; additions, Pineside Laundry, Pine-rd., H. Blakeley; alterations, Palmerston Hotel, Christchurch-rd., Ellis & Co.; glazed roof, Imperial Hotel garages, Meyrick-rd., Grand and Imperial Hotels, Ltd.; 15 houses, Seafield-rd., J. Jaques; 3 lock-up garages, Firs Glen-rd., McAdam; 4 houses and garages, Norton-rd., A. F. V. Holly.

Bosham.—West Sussex C.C. are to spend £1,662 on widening and reconstruction of Broad-bridge.

Bradford.—Corporation Street Improvement and Buildings' Committee asked City E. and City Architect to prepare plans for reconstruction of area to rear of Market-st. from Dean & Dawson's corner round by Leeds-rd. and new Bank-st.—property opposite island site which is shortly to be cleared for bloc kof municipal shops and offices.

Bridlington.—T.C. passed plans:—L. Stewart, 2 houses, corner of 2nd and 3rd Avenues, Sands Cottage estate, for A. Russling; L. Stewart, 7 lock-up garages, workshop and 3 petrol pumps, Fortyfoot-rd., for R. Barron; Oliver & Linnell, 4 houses, Marton-rd., for T. R. Watt Wyness.

Bridlington.—Corporation are to erect new shelters on new Princess Mary sea wall on south side of town.

Brighton.—Governors of School for Blind Boys proposing to spend £5,500 for enlargements to school.

Brinsworth.—Church hall is to be erected upon site presented by J. Brown, Ltd.

Bromley.—T.C. made application to M.H. for sanction to borrow £34,400 for 91 houses on Southborough housing estate.—Plans passed: P. G. Newton, 2 houses, Woodside-rd.; G. L. Walton, 2 houses, 80 and 82, Farnaby-rd.; W. Reynolds & Co., 4 houses, Rochester-av.

Cadoxton Barry.—Funds are being raised for erection of St. Aidan's new church at Cadoxton-juxta-Barry.

Caernarvon.—M.H. held inquiry into application of Caernarvon C.C. for sanction to borrow £10,000 for converting Caernarvon Prison into county offices.

Cashel.—Tipperary C.C. sanctioned proposal of Board of Health to borrow £2,000 for carrying out improvements at County Home.

Castle Donnington.—R.D.C. instructed architect to prepare plans for houses.

Cheltenham.—T.C. passed plans:—C. Dennis, new tea room and petrol filling station, Gloucester-rd.; Corporation, electricity sub-station, off Clarence-rd.; G. H. Roberts, 4 semi-detached houses, All Saints'-rd.

Chertsey.—R.D.C. are to erect 16 houses at Byfleet.

Chesterfield.—District Valuer places valuation of Highfield Hall and adjoining land at £2,560, and E.C. are proposing to convert hall into infants' school.

Chorley.—T.C. passed plans:—J. W. Lee, Ltd., 4 bungalows in Blackburn-rd.; J. W. Lee, Ltd., 2 pairs of semi-detached houses, Claremont-av., and 1 pair Isleworth-drive.

Cleckheaton.—Provisional plans been prepared by R. Castle and Sons, architects, for public library. Tenders are to be invited.

Cleve Legs.—Members of Congregational Church raising funds for church.

Cleethorpes.—With object of reclaiming portion of Humberstone Fitties, in order to add it to Thurnscoe pleasure ground, Council decided to apply for permission to borrow £27,000.

Conway.—Corporation are to begin building operations upon a fraction of the land at Recreation Club.

Coventry.—T.C. passed plans:—Licensed premises, corner of Holyhead-rd. and Moseley-av., for Mitchells & Butlers, Ltd.; 2 houses and 2 private garages, corner of Stoneleigh-av. and Southleigh-av., for H. Clarke & Son; 2 houses, Nunt's-lane, for H. G. Adams; 3 new streets, Holbrook Building estate, off Holbrook-lane, for Kelley & Son; 8 houses, Bassett-rd., for A. Ward; 36 houses, Swan-lane, for Ives & Rushby; transformer house, Warwick-st., for Coventry Gauge and Tool Co., Ltd.; 6 houses, Newfield-rd., for J. G. Gray; 4 shops and 2 flats, corner of Longford-rd. and Dovedale-av., for W. H. Green; 4 houses, Woodside-av., for A. Harris; 2 houses, Radford-rd., for Cooper & Hall; alterations and additions to premises, corner of Eagle-st. and Stoney Stanton-rd., for W. Burgess; extension of works, Stoke-row, for Cross & Ellis, Ltd.; 4 houses, Whoberley-av., for T. Seal; 2 houses, Broad-lane, for J. Bolland.

Dagenham.—U.D.C. passed plans:—Extension, Working Men's Club, Broad-st., for the Dagenham Working Men's Club; 16 houses, Cecil-rd., for St. Chad's Estate Co., Ltd.; parochial hall, Gorsebrook-rd., for His Lordship the Bishop of Brentwood; 7 shops and dwellings, Oxlow-lane, for Mr. Odell; 6 shops and houses, Oxlow-lane, 9 to 14, for Miss E. M. Gardiner.

Derby.—T.C. proposing to make extensions at the Borough Mental Hospital at £2,000, whereby 20 additional beds will be provided.

Derby.—E.C. are being urged to erect a school at Nottingham-rd. instead of carrying out extensions to existing temporary school. Corporation are to erect 150 houses on Nottingham-rd. estate. Church schools are to be extended by erection of classrooms, gymnasium and art room.—Church hall is to be erected on site on Newton's-walk, facing Sherwin-st., at £4,000.

Doncaster.—Proposal to establish artificial silk factory been helped forward by R.D.C. when they considered a letter from Corporation on behalf of British Bemberg, Ltd.

Doncaster.—Parishioners of St. Mary's Church raising funds for Sunday schools. Plans by J. Blythe Richardson, L.R.I.B.A., Printing Office-st., Doncaster.—Church Council of Priory-place Chapel consulted Sir A. Gelder, architect, of Hull, in connection with scheme of restoration of front of edifice.

Driffield.—Funds being raised for cottage hospital to replace one at present.

Dublin.—New transformer station is to be built on ground, with frontage to Fleet-st. and Bedford-row.—Plans passed: alterations, 42 and 43, Westland-row, W. F. Poole & Co.; 60 houses, Griffith-av., for Dublin Commercial Public Utility Society.

Durham.—Site been purchased at Boldon Colliery for new elementary school for E.C.

East Suffolk.—E.C. instructed County Architect on preparation of plans of proposed new schools and reconstruction of schools; the following is the order of urgency: Bramford new senior school; Combs new junior school; Kesgrave new school; Leiston senior Council school enlargement; Witnesham new area school; and Raydon Council school reconstruction.

Ecclesfield.—Rev. A. Pawson and parishioners of parish church proposing to improvements to Rawson Infant School. Plans by T. Hensen Robinson, A.R.I.B.A., Mazda-buildings, Campo-lane, Sheffield.

Edmonton.—U.D.C. passed plans:—G. W. Newman, lock-up shops adjoining 89, Hertford-rd.; F. T. Lawes, 8 houses in Ridge-av.

Erdington.—Birmingham E.C. propose to erect a secondary school and new junior school at Pype Hayes. Tenders for latter contract are to be invited.

Erith.—U.D.C. passed plans for 4 houses, The View, Abbey Wood, for Feakes & Richards.

Eton.—R.D.C. passed plans: Burnham: alteration to building in Windsor-lane, for E. A. Beechcroft; factory in Bedford-av., for Slough Estates, Ltd.

Fareham.—Hampshire C.C. are to spend £12,200 on erection of new school for senior girls.

* See also our List of Contracts, Competitions, etc.

Farnborough.—Hampshire C.C. approved £2,655 for playing field and site for secondary school.

Finchley.—U.D.C. passed plans:—Reception and dance hall, adjoining existing Finchley dance hall, Great North-rd., A. V. Greenfield; 4 houses, 8, 10, 12 and 14, Claremont-park, Aird & Baldwin; tennis pavilion, Northwold School Ground, Essex-park, R. A. O. Ingleby; 14 houses, Briarfield-av., adjoining North Circular-rd., G. Payne & Co.; 7 lock-up shops and 14 flats over, junction of Lyttelton-rd. and Hill-rise, Second Hampstead Tenants, Ltd.; new dairy, Great North-rd., junction of Ravensdale-av., London Co-operative Society.

Foynes.—Limerick County Health Board is to spend £300 on supplementary storage reservoir at Waterworks.

Goole.—R.D.C. resolved that surveyor be instructed to prepare schemes for erection of 5 houses in Hook, 8 in Swinefleet, 4 at Snaith, 4 at East Cowick, and 4 at Whitgift.

Guildford.—E.C. propose to extend central school and adapt the old British School for purpose of handicraft centre, and have decided to engage Brownrigg and Hiscock as architects.

Guildford.—Technical Institute sub-committee requested that six acres of land in Stoke Park be allocated as site for suggested new technical institute.—T.C. passed plans: 12 proposed semi-detached cottages, Old Farm-rd. and Woodland-rd., for W. G. Sheppard, junior; 4 semi-detached cottages, Woodland-rd., for F. Smith; 4 detached houses, Woking-rd., for J. Purser; 5 houses, Grantley-rd., for W. J. Piner.

Halifax.—Improvement Committee approved plans for lay-out of 120 houses in Club-lane and Cousin-lane, for J. H. Naylor & Son and Miss Inez May Helliwell.

Hampshire.—C.C. approved proposals for provision of further mental hospital accommodation.

Hanley.—Funds are to be raised for elementary school in parish of Our Lady.

Harefield.—It is proposed to erect Roman Catholic Church on a site owned by J. Whittle, at old vicarage.

Hatfield.—Application is to be made to M.H. by R.D.C. for sanction to borrow £850 for erection of two additional houses at Little Heath.

Hayes.—U.D.C. approved recommendation from Works Committee to appropriate a portion of Botwell recreation ground, abutting on East-av., for public lavatory, and to authorise Surveyor to prepare plans.—The Council also approved plans and estimates for bungalow for Town Hall caretaker, also a mortuary ambulance station, garage and workshop on land on west side of entrance drive to Town Hall; and also decided to make application to M.H. for sanction to borrow £700 and £1,375.—Plans for 4 houses in Queen's-rd, for G. Salter, and 12 in Cromwell-rd., for B. Elcock, been approved.

Hemsworth.—B.G. desire to erect their new Infirmary by direct labour.

Hendon.—U.D.C. passed plans:—4 houses, St. Mary's-crescent, Hendon, J. McKenzie; transformer house, Edgware-rd., Hendon Electric Supply Co.; 11 shops and flats over, Vivian-av., Hendon, Harry Neal, Ltd.; 6 blocks of flats at Emmott-close, Hampstead Garden Suburb, Copley Bros.; 6 detached houses, Hillside-grove, Mill Hill, S. W. Woodward; 6 houses, The Drive, Mill Hill, C. A. Piper; transformer house on North End-rd., Golders Green, Hendon Electric Supply Co.; 4 houses, Sunny Hill, Hendon, A. E. Thurlow; additions to block of flats, Golders Green-rd., H. V. Rowlands; alterations to Church House, Church End, Hendon, L. G. Dyke.

Herne Bay.—Herne Bay Estates Co. purchased site of Town Hall for erection of theatre, estimated to cost £18,000.

Hinckley.—U.D.C. proposing to develop land for housing purposes on extensive scale

Horsham.—Drainage scheme for Crawley and Ifield, which is estimated to cost nearly £14,000, been sanctioned by Horsham R.D.C.

Hull.—T.C. passed plans:—T. Dixon & Co., 6 houses, Belgrave-drive; F. C. Polley, 6 parlour houses, Belgrave-drive; G. H. Shields, 6 parlour houses, Pickering-rd.; H. Sanderson, 8 houses, Parkfield-drive.

Hythe.—Wall adjoining the Small Arms School, is to be set at an estimated cost of £497 by Kent C.C.

Ibstock.—Parochial Committee instructed surveyor to get estimates for public abattoir, and report.

Ipswich.—E.C. recommend borrowing £9,455 for new school on Gainsborough estate.

Isle of Ely.—C.C. approved erection of bridge across Old West River, and improvement of Twentypence-rd., between Cottenham and Wilburton, provided M.T. agree to make a grant of not less than 75 per cent. of cost.

Keswick.—Lake and Amusements, Ltd., decided to build an up-to-date bathing pool.

Langport.—R.D.C. are to erect 26 further houses at Huish Episcopi, Kingsbury Episcopi, and Curry Rivel. Tenders are also to be obtained for houses at Somerton.

Leeds.—Parks and Allotments Committee decided that crematorium facilities ought to be provided and a scheme for development of Cottingley Hall Cemetery site, Elland-rd., at £40,000 is to be considered.

Leeds.—Meredith and Drew propose to erect distributing warehouse upon a site fronting Florence-st., of Compton-rd.

Leicester.—City Council are proposing £35,435 on improvement of roads on Braunstone housing estate.—Chimney of Mill Lane destructor is to be rebuilt at £740.

Liverpool.—Lancashire and Cheshire Federation of Head Teachers stated that plans are before B. of E. for the new School of Commerce to be erected in Tithebarn-st., Liverpool.

Liverpool.—E.C. are to apply for sanction to borrowing of £3,300 in respect of purchase of site and premises of St. John the Baptist School, Wellington-rd.; and to purchase 9,090 sq. yds. of freehold land in Queen's-drive, Stoneycroft, for erection of two departments of Corinthian-av. Council school.

London (Camberwell).—B.C. recommend £884 for carrying out structural and other repairs at 8, 10, 12 and 14, Sultan-st.—Plans passed: H. Powell, garages, Hall-rd.

London (Eltham).—L.C.C. recommend £150,000 in respect of (i.) construction of section of the south circular road from a point near junction of St. Mildred's-rd. and Baring-rd. to Eltham-rd., including widenings of St. Mildred's-rd., Baring-rd. and Burnt Ash-hill and construction of a railway bridge and (ii.) construction of a railway bridge in, and completion of, section of south circular-road between Eltham-rd. and Well Hall-rd.

London (Fulham).—L.C.C. recommend £5,000 for housing purposes on portion of Harwood-rd. (disused) school site, Fulham.

London (Hampstead).—Licensing Session granted application to make structural alterations at Old Black Lion, 295, West End-lane, N.W.6.

London (Holborn).—L.C.C. recommend £24,200 for purpose of widening of Great Queen-st. at Drury-lane and Wild-st.

London (Islington).—L.C.C. recommend borrowing by B.C. of £9,251 for housing purposes within the borough.

London (Lambeth).—B.C. passed plans: C. Hannaford & Sons, garages on site on western side of Norwood-rd.; E. W. Wallis, 3 houses, Ferndene-rd.

London (Lewisham).—B.C. passed plans: Middletons (Builders), Ltd., 5 houses, Perry-hill; F. R Hipperson, school, Riddons-rd.

London (Stoke Newington).—The old parish church is to be restored at £1,400.

London (St. Marylebone).—L.C.C. recommend borrowing by B.C. of £3,956 for housing.

London (Strand).—L.C.C. recommend £9,435 in respect of provision of office accommodation at Trafalgar House, Charing Cross, and electric light fittings and telephones.

London (Westminster).—L.C.C. recommend £5,600 in respect of adaptation of Belvedere-rd. tramways offices to accommodate tramways head office staff, and £9,700 for adaptation of Belvedere-rd. and Effra-road tramways offices.

London (Westminster).—L.C.C. recommend borrowing by Westminster City Council of £91,000 for depot works.

London (Woolwich).—B.C. recommend that repairs and renovations necessary to 13, 15 and 17, Lenton-st., be carried out at £134.—Application is to be made to Electricity Commissioners for sanction to borrowing of £30,720, for provision of deep river wharf, acquisition of further wharves and for erection of a new wharf wall at Council's generating station, at Globe-lane, Woolwich.—Application is also to be made to L.C.C. for sanction to borrow £50,389, for street widenings and improvements, etc.—Plans passed:—Eaglen Bros., 186, Burnt Ash-hill, Lee, S.E.12, 10 houses, 56 to 74, Cadwallon-rd., Eltham; F. Holder, 1, Katrine-terr. Eltham, 8 bungalows, Blanmerle-rd., Eltham; J. B. Farrugia, 46, Thomas-st., Woolwich (on behalf of H. W. Slegg), 7 houses, 77 to 89, Gerda-rd., Eltham.

Malvern.—Worcestershire E.C. propose to erect another open-air school.

Manchester.—Failsworth Industrial Society, Ltd., Church-st., Newton Heath, proposing to make alterations and additions to branch premises in Silver-st., Miles Platting. Cleansing C. proposing provision of electric light at Oldham-rd. depot.—Trustees of Moravian Church, Wheler-st., Openshaw, proposing to erect new edifice and make additions to school. Plans by Taylor & Simister, L. & F.R.I.B.A., 29, Queen-st.—Governors of Henshaw's Blind Institution have under consideration offer of site at east end of Lytham Promenade for purposes of seaside home.

Manchester. — Groves and Whitnalls, Ltd., brewers, Regent-rd., Salford, proposing to carry out sanitary alterations to "Leigh Arms," Leigh-grove, Stockport-rd., Ardwick. Plans by C. Clegg and Son, architects, 30, Brown-st.—Cornbrook Brewery, Ltd., Ellesmere-st., Trafford-park, proposing to carry out improvements to following houses:—"Swan Inn," Chester-st., Hulme; "Victoria Inn," Craston-st., Miles Platting; "Wheat Sheaf," Oldham-rd., Miles Platting; and "Nottingham Castle," Miles Platting.

Mansfield.—T.C. passed plans:—Mansfield and District Hospital, extension to hospital, West Hill-drive; F. Fowler, 6 houses, Southwell-rd.; Modern Home Builders, Ltd., new street (Garth-rd.), High Oakham-rd.; Mansfield Shoe Co., extension to factories, Stockwell-gate.

Melton Mowbray.—U.D.C. proposing to erect 9 houses on Nottingham-rd. housing site.

Middlesbrough.—E.C. decided to convert schools still lighted by gas into electrically illuminated schools, at £1,600.

Mitcham.—U.D.C. passed plans:—C. H. Riches, rebuilding "Surrey Arms," Morden-rd.; J. Sands, 30 houses, Lavender-av.; H. Poulson, 36 houses, Mitcham-park; Express Dairy Co., steel building, Morden-rd.

Naas.—Co. Kildare Board of Health is making application to C.C. for consent to borrow £2,000 for provision of operating theatre at County Hospital.

Norden.—Site been acquired in Pilling-st. for headquarters and drill hall for Norden Division of the Ambulance Brigade.

Northampton.—B.E. submitted plan showing extension of existing abattoir, at £740, and C.B. resolved that plan be adopted and tenders invited.—Plans passed: additions and alterations to factory, Pine-st., Impress Leather Co.; engineering workshop, St. Andrew's-st., A. H. Allen; fruiterer's business premises, 118, Wellingborough-rd., G. Thompson; club room, bar and conveniences, Grand Stand, County Ground, Northampton Town Football Club, Ltd.; commercial photographic works, Clarence-av., H. Moore; 8 houses, Murray-av., Chowns, Ltd.; 4 houses, The Drive, S. G. Sale & Co.

North Evington.—Contract for a new school, to hold about 500 and to cost £7,500, is to be placed shortly. Plans by A. Hind, F.R.I.B.A., 3, Grey Friars, Leicester.

Normanton.—B. of E. sanctioned scheme of extensions at Grammar School, at £17,000.

Nuneaton.—M.H. given T.C. sanction for borrowing of £40,614 for erection of 115 houses on Attleborough No. 2 housing scheme.

Park Prewett.—Hampshire C.C. approved erection of an additional 8 cottages for the staff, at £3,750.

Penrith.—U.D.C. proposing to build 58 new houses in connection with West-lane improvement and widening scheme.

Portadown.—Ministry of Labour is giving U.D.C. grant of £27,600 in connection with main drainage scheme.

Preston.—C.B. passed plans:—B. Crabtree, for I. Spencer & Son, 26 houses, St. Gregory's-rd.; A. C. M. Lillie, for J. Topping & Son, showroom and warehouse, London-rd.; C. D. Quinn, for Ribble Motors, Ltd., additions to works, Frenchwood-av.; A. Conway, warehouse, 23, High-st.; H. Heaton & Son, for Buck & Abbott, new streets, Lulworth-rd. and Haig-rd.; T. Charnley, garages, Morgan-st.; Mercer & Duckworth, for F. Riding, garages, St. Gregory's-rd.; A. L. Stubbs, for J. Masheter, 118 houses, Boulevard, Esplanade, Malvern-av., Mayfield-grove, and Mayfield-crescent.

Preston.—T.C. instructed surveyor to prepare plans for houses and flats on Swansea estate.

Rochdale.—Alterations to "Flying Horse" hotel, Town Hall-sq. Plans by H. H. Clough, architect, Newgate-chambers.

Rotherham.—B.E. submitted final plans and drawings in respect of new Central Library, to be erected on portions of the St. George's Hall site, and recommend they be approved, and that he be instructed to prepare specifications and quantities, and tenders be invited. Further recommendation is that Town Clerk be instructed to apply to M.H. for sanction to borrowing sum of £16,000 in respect of new building.

Rugby.—U.D.C. passed plans:—3 lock-up shops and 2 flats, Clifton-rd., Mrs. A. M. Carter, per Willard & Son; alterations to 5 and 6, North-st., T. W. Willard, per Willard & Son; 10 subsidy houses, Eastlands estate, D. Mitchell & Son, Ltd., per Franklin & Newman.

Scarborough.—Parochial Council of Scalby Parish Church seeking site for new edifice.—Funds being raised to provide further accommodation at Falsgrave Wesleyan Church.

Scarborough.—M.H. held inquiry into application of T.C. for sanction to borrow £2,500 for improvements at Peasholm Park, including additional lighting, and construction of a pavilion and cascade on island.

Scunthorpe.—Scunthorpe and Frodingham U.D.C. agreed to £1,250 on extension of Maternity Home.

Sedgley.—Preparation of a town-planning scheme for portion of parish of Sedgley been approved by District Council.

Sheffield.—Funds being raised by parishioners of St. Oswald's Millhouses, for hall, estimated to cost £6,500. Plans by J. P. Wigfull, F.R.I.B.A., 14, Parade-chambers.

Sheffield.—T.C. passed plans:—6 houses, Ansell and Falkland-rds., for A. J. Belton; 4 houses, Don-av. and Langsett-av., for G. Hardwick; 4 houses, Glenorchy and Struan-rds., for H. & E. Plant; 6 houses, Endowood-rd., for J. A. Wragg; 4 houses, Little-Norton-lane, for G. R. Parkin; 12 houses, Hutcliffe Wood-rd., for A. J. Belton; rebuilding "Bee Hive" inn, Dykes Hall-rd., and Far-lane, for J. Smiths Tadcaster Brewery Co., Ltd.; 44 houses, Wybourne Estate, Cricket Inn-rd., for Corporation; 109 houses, Longley estate, for Corporation.—Old Jewish synagogue in North Church-st. is shortly to be superseded by a more commodius building in Wilson-rd., Hunter's Bar. The new building will have seating accommodation on ground floor for 600 worshippers, and for 400 in gallery. Architects are Rawcliffe and Ogden, of Norfolk.

Slough.—U.D.C. possed plans: Alterations to 132, High-st., for Boots, Ltd.; two pairs of houses in Durlington-av., for J. A. Simons; pair of houses in Wexham-rd., for A. T. Ricketts; two pairs of houses in Harewood-place and Upton-rd., for Mrs. N. Street; two pairs of houses in Ragstone-rd., for J. W. Holdway; 6 houses in Bradley-rd., for T. H. Langley; 10 houses in St. Paul's-av., for Pondac, Ltd.

Southgate.—U.D.C. passed plans:—H. W. Partridge, 6 houses with garages, Bowes-rd.; C. W. Fifield, 4 houses with garages, Langside-crescent; G. W. S. Ingram, 6 houses with garages, Oaklands; J. Farrer & Son, 22 houses, 19 with garages, Minchenden-crescent; C. S. Brown, 11 garages, rear of Aberdeen House, High-st.

Staines.—R.D.C. sanctioned application by H. C. Belch, of Harlington, on behalf of the Fairey Aviation Co., for land of an area of about 50 acres at Heathrow, to be used for the purpose of an aerodrome and necessary works appertaining thereto.

Shipley.—U.D.C. propose to reconstruct public baths at £5,200.

Staines.—Plans passed by R.D.C.:—N. Parr, architect, alterations, "Beehive" public-house, Staines-rd., Bedfont; Lloyds Bank, Ltd., bank, Woodthorpe-rd., Ashford; Waste Food Products Co., factory, Court Farm, West Bedfont.

St. Albans.—Christ Church are raising funds for extension of work on Townsend Estate, where it is hoped shortly to purchase a piece of land and erect a temporary hall.

Stoke.—Council accepted tender of local builder for further eight all-electric houses at Avenue-rd., Hanley, for £4,466.

Sturry.—Subject to grant from the Ministry, Kent C.C. are to erect a steel footbridge outside north parapet of White Mill Bridge, at £750.

Sutton Coldfield.—Council passed plans:—6 houses, Walmley-rd., for A. P. Johnson; 6 shops, The Parade, for Arnold & Hewitt; 10 houses, Tower-rd., for Housing Committee; church and institute, Boldmere-rd., for Trustees of Roman Catholic Church.

Tanderagee.—Armagh C.C. are to seek authority to borrow £9,000 for erecting a public school at Ballymore.

Tynemouth.—T.C. passed plans:—6 houses, Ancroft-av., Ingleside estate, by A. K. Tasker, for Ball Bros.; receiving home, "Ayton House," Brightman-rd., by W. Stockdale, for B.G.; 6 semi-detached houses, Newton-av. and Hatherton-av., by J. R. Wallace, for H. D. Burton, Ltd.; 4 semi-detached houses, Shorestone-av., by J. R. Wallace, for H. D. Burton; 12 houses, Links-rd., Cullercoats, for W. H. Browse.

Uxbridge.—U.D.C. passed plans: 3 pairs of houses, Chiltern View-rd., for W. E. Black; alterations, 174, High-st., for Boots.

Wakefield.—City Engineer is to prepare plans for convenience at Eastmoor recreation ground.

Wallasey.—Works Committee of Council prepared scheme for widening, reconstruction, and improvement of portion of Seabank-rd., from King-st. to Hertford-drive, at £34,600

Wallasey.—Application been made to M.H. for sanction to proceed with scheme for development of Upton Park estate.

Warrington.—C.B. instructed B.S. to obtain tenders as soon as site has been secured for public convenience in Orford-lane district.—Plans been approved, and application is to be made to M.H. for sanction to borrowing £1,858 for erection of shelters and conveniences at Manchester-rd. tram terminus.—B.S. is to invite tenders for erection of conveniences at Victoria-park on land belonging to the Parks Committee on river bank, at £400. Application is to be made to M.H.—B.S. submitted plan of proposed shelter and convenience at Cemetery Tram terminus, which was approved, and has been instructed to advertise for tenders for carrying out work.—Town Clerk reported that Central Electricity Board now adopted scheme for North-West England and North Wales area, Warrington being one of the selected generating stations.—Plans passed: dire racing track off Slutchers-lane, for Warrington Dirt Track Racing Association, Ltd.; mission hall, slater-st. and Beatrice-st., for Trustees of Evangelical Mission.

Wath-on-Dearne.—Council is to apply for loan of £3,400 for conversion of sanitary arrangements at 232 houses in Winifred-rd., Edna-st., Commonlane, Sandymount-rd., Doncaster-rd., Linden-rd., Brampton-rd., Holber-st., Carnley-st., Packman-rd., Rotherham-rd.

Winchester.—Hampshire C.C. sanctioned £1,200 for additions to Lankhills special school.

Wisbech.—T.C. propose erecting 20 more houses in New-drove, and 6 at Ring's-end.

Wood Green.—U.D.C. resolved that, subject to approval of B. of E., clerk be instructed to apply to M.H. for sanction to borrowing of £18,180, for erection of new school and caretaker's cottage in Albert-rd.

Woking.—An important scheme of reorganised school accommodation at Knaphill, St. John's, and Brookwood, entailing erection of a new central school at Knaphill, been put forward by E.C. a secondary school for boys. It is proposed that matter be placed before County Education Committee.

Workington.—E.C. propose to purchase site in High-st. for erection of central school.

York.—T.C. passed plans:—Horsley, Smith & Co., additions, Piccadilly; A. Lawson, 6 garages, Heworth-green; J. J. Hunt, Ltd., public house, "Half Moon" Inn, Blake-st.

TRADE NEWS

Spitalfields Market.

We learn that the roofs, lanterns, canopies, and roofs over entrances of this new market—opened by H.M. the Queen on November 22—were glazed on the "Invincible" system, in which Messrs. W. Edgcumbe, Rendle & Co., Ltd., of 5, Victoria-street, S.W.1, specialise. The area roofed was 53,766 ft. super, while the steel louvres forming the ventilation of the lanterns were fixed also by this firm.

Asphalt for Egypt.

The Commercial Secretary at Cairo (Mr. R. M. A. Turner, O.B.E.) reports that the Egyptian Ministry of Public Works is calling for tenders, to be presented in Egypt by January 22, 1929, for the supply of 6,800 metric tons of asphalt for the Tanzim Department, Cairo. United Kingdom firms can obtain further particulars of this call for tenders upon application to the Department of Overseas Trade, 35, Old Queen-street, London, S.W.1. Reference number BX.4920 should be quoted.

Oddenino's Hotel and Restaurant.

Appreciative comment has been passed upon the decorations of the new Oddenino's Hotel and Restaurant (illustrated in our last issue), but some confusion may arise as to the means and material used in achieving the results through similarity of phraseology in two announcements in last week's issue of *The Builder*. The treatment of the walls throughout the building was in Marb-l-cote," the material by which the marled, stippled and stone block effects were achieved in the public rooms, and which form a permanent decorative finish to the walls. "Marb-l-cote" was afterwards coloured and gilt with the paints of the Fairfield Paint Co.

We learn that Messrs. E. Parkinson (London), Ltd., of 189-191, High-road, S. Tottenham, N.15, carried out the whole of the glazed tiling.

An Excavator Demonstration.

On November 6 a display of excavating work was given at Lincoln by Messrs. Ruston & Hornsby, Ltd. Demonstrations were given with the "Ruston B" and "Ruston 135" dragline excavators, illustrations of which are shown on this page. The machines are required for excavating canals at Damodar, within 100 miles of Calcutta. Both are fitted with a special false roof for working under tropical conditions, and the larger machine has a motor-driven pumping set for supplying water to the tanks. Special precautions are taken to protect the gears from dust, the travelling gears being totally enclosed, and the gears on the superstructures fitted with dust covers. They are mounted on caterpillar tracks, and have a jib length of 60 ft. and 100-115 ft., with a bucket capacity of 2¼ cub. yards and 3-2½ cub. yards respectively. The working weights are 112 tons and 232 tons.

Apropos of excavator work, we are informed that the Government have awarded a £70,000 contract for excavating machinery for the Singapore Dock without inviting any British firm to tender. If this is so, it is difficult to understand, for there are several British firms whose excavating plant is equal to anything the world can produce. British industry to-day requires all the encouragement that the Government can give it.

NEW CINEMAS

Barking.—Mr. J. A. Aldridge, Lonsdale-gardens, Eastern-avenue, Ilford, is architect for the proposed cinema in East-street, announced in our last issue.

Cambridge.—Mr. Harold Tomlinson, of the Cambridge University Architectural Society, and Mr. Raymond McGrath, have been invited to prepare a scheme for the development of a site on Market Hill, opposite King's College Chapel, where it is proposed to erect a cinema.

Ely.—The contract for the erection of the cinema in Market-street—announced in *The Builder* for October 26—has been awarded to Mr. H. F. Wykes, Downham-road, Ely. The architect is Mr. F. Burdett Ward, L.R.I.B.A., 8, South Brink, Wisbech.

Islington.—The Building Acts Committee of the L.C.C. recommend for approval plans prepared by Mr. E. A. Stone, F.S.I., 20, Berkeley-street, W.1, for a cinema abutting upon Seven Sisters-road, Isledon-road and Coleridge-road, Islington. It is understood that no contract has yet been let.

Lewisham.—A site for a cinema at Loampit-lane, Lewisham, is offered for sale by Messrs. Hillier, Parker, May & Rowden, 27, Maddox-street, W.1. Plans for a 3,000-capacity cinema have been prepared by Mr. H. W. Binns, F.S.I., 15, Soho-square, W.1.

London.—It is understood that the Denman Construction Co., which is allied to the Gaumont British Picture Corporation, of 6, Denman-street, W.1, is to build a number of new super-cinemas in London and the Provinces.

Luton.—Mr. George Coles, F.R.I.B.A., 40, Craven-street, Strand, is architect for the 2,500 capacity cinema, first announced in our issue for October 26 as having been planned for Mr. S. C. Dillingham in Alma-road. The cost is to be £100,000.

Northfleet.—A block of new buildings, comprising a picture theatre to hold 700 persons, shops, etc., is to be erected in the High-street. The builder is Mr. J. Clements, London-road, Northfleet. The plans have been prepared by Mr. Edwin W. Filkins, A.R.I.B.A., The Bungalow, Claphall, Gravesend.

Rotherham.—Mr. P. A. Hinchliffe, architect, Regent-street, Barnsley, has prepared plans for the erection of a new cinema at Swinton.

Southend-on-Sea.—The Corporation has plans before it for a new cinema at West Leigh, to accommodate 1,500.

A "Ruston" Excavator at Work.

A "Ruston" Excavator showing Caterpillar Wheels.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 5 6
Second Hard Stocks	3 19 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at King's Cross	2 12 3	Best Blue Pressed Staffs	9 5 0
Do., grooved for Plaster	2 14 3	Do. Bullnose	9 15 0
Do., Bullnose	3 7 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire Brick :—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	1 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers	26 10 0
		One Side and two Ends	30 10 0
Headers	20 10 0	Two Sides and one End	31 10 0
Quoins, Bullnose and 4½ in. Flats	27 10 0	Splays, and Squints	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS
Delivered London

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in per yd. super	2 9
2½ in. ,, ,,	2 4	4 in. ,, ,,	3 6

	s. d.		
Thames Ballast	9 9	per yd.	delivered 2 miles radius Paddington.
Pit Sand	12 0	,, ,,	
Thames Sand	12 6	,, ,,	
Best Washed Sand	12 6	,, ,,	
½ in. Shingle for Ferro-Concrete	12 0	,, ,,	
¾ in.	12 6	,, ,,	
¾ in. Broken Brick	11 6	,, ,,	
Pan Breeze	8 0	,, ,,	

Per ton delivered in London area in full van loads.
Best Portland Cement. British.
Standard Specification. Test £2 6 0 to £2 8 0 39s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 7 6
Super Cement (Waterproof)	3 16 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
,, ,, Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
,, ,, White	3 12 6
,, Fine	5 12 0
Sirapite, Coarse	3 9 0
,, Finish	3 17 0
Grey Stone Lime	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair per cwt.	2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.
Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

STONE.

BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube..... s. d. 2 10

BEER STONE—RANDOM BLOCK—
Free on rail at Seaton Station per ft. cube 2 3
Delivered free on rail Nine Elms, S.R. per ft. cube 3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.

PORTLAND STONE.—
Brown Whitbed, in random blocks ot 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube..... 4 4½
Do. do. delivered on road wagons at above stations, per ft. cube..... 4 5½
White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ¼d. beyond 30 ft.

HOPTON-WOOD STONE.—
Delivered at any Goods Station, London. s. d.
Random blocks from 10 ft. and over P. ft. cb. 14 0
Sawn two sides ,, 22 6
Sawn three or four sides ,, 27 6

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station, London.
6 in. sawn two sides landings to sizes (under 30 ft. super).....Per ft. super 5 6
6 in. rubbed two sides, ditto ,, 6 0
3 in. sawn two sides slabs (random sizes) ,, 2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ,, 1 6½
1½ in. to 2 in. ditto, ditto ,, 1 3½

HARD YORK—
Delivered at any Goods Station, London.
Scappled random blocks .....Per ft. cube 6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) .....Per ft. super 5 1½
6 in. rubbed two sides, ditto ,, 6 1½
4 in. sawn two sides slabs (random sizes) ,, 2 1½
3 in. ditto ditto ,, 2 10
2 in. self-faced random flags.....Per yd. super 8 8

CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.: Moulded, 9s. 6d.: Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£30 0	3 × 6	£21 0
4 × 9	26 0	3 × 11	25 0
4 × 8	25 0	2 × 11	26 0
4 × 7	23 0	3 × 9	24 0
3 × 8	22 0	2½ × 9	24 0
3 × 7	22 0	3 × 4½	21 0
2½ × 7	21 0	3 × 4	21 0

PLANED BOARDS.

1 × 11	£30 0	1 × 9	£28 0

PLAIN EDGE FLOORING

Inches.	per sq.	Inches.	per sq.
⅞	18/-	1¼	30/-
⅝	21/-	1½	34/-
1	24/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.
1	24/-
1¼	30/-
1½	34/-

MATCHING (BEST).

Inches.	per sq.
⅝	16/6
¾	19/-
1	24/-

ins. BATTENS.	s. d.
¾ × 2 ..... per 100 ft.	2 6

SAWN LATHS. s. d.
Per bundle 2 6

1" AND UP THICK.

	£ s. d.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 16 0	to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 14 0	to 0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 10 0	to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 15 0	to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 16 0	to 1 1 0
Dry Cuba Mahogany, ft. cube	1 1 0	to 1 10 0
Dry Teak, ft. cube	0 13 0	to 0 15 0
Dry American Whitewood, ft. cube	0 10 0	to 0 14 0
Best Scotch Glue, per cwt.	4 10 0	to —
Liquid Glue, per cwt.	4 7 0	to 5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000.

	£ s. d.		£ s. d.
24 by 12	32 18 4	18 by 10	18 12 11
22 by 12	29 17 11	18 by 9	16 9 2
22 by 11	27 14 2	16 by 10	15 12 6
20 by 12	26 5 0	16 by 8	12 3 9
20 by 10	22 10 0		

TILES.

Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000. f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 7 6
ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand-made	0 9 6
Hip and valley tiles (per dozen) Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
,, Stanchions	16 10 0
,, In Roof Work	19 10 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ½ in.	10 15 0
⅜ in.	11 0 0	⅝ in. to 2¾ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ½ in. and under.	Fittings. Over ½ in.	Flanges. ½ in. and under.	Flanges. Over ½ in.
	%	%	%	%	%	%
Gas	67½	50	42½	45	52½	55
Water	63¾	46¼	37½	40	47½	50
Steam	60	42½	32½	35	42½	45
Galv. Gas	55	37½	32½	35	42½	45
Galv. Water	50	32½	27½	30	37½	40
Galv. steam	45	27½	22½	25	32½	35

C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/3½	11½d.	3½d.
3½ in.	1/4½	1/1½	3½d.
4 in.	1/6	1/3	3½d.
4½ in.	1/7½	1/4½	4½d.
5 in.	1/10½	1/6½	5½d.

O.G. GUTTERS.

3 in.	1/8	1/4½	3½d.
3½ in.	1/8	1/4½	3½d.
4 in.	1/9½	1/4½	3½d.
4½ in.	1/11½	1/7½	4½d.
5 in.	2/4½	1/10½	5½d.

RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/10½	1/3	1/9½
2½ in. ,,	2/0½	1/4½	2/1½
3 in. ,,	2/6	1/9	2/7½
3½ in.	2/11½	2/0½	3/0½
4 in. ,,	3/5	2/6½	3/8½

L.C.C. COATED SOIL PIPES—London Prices ex Works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
2 in. per yd. in 6 fts. plain	3 3	2 4½	2 10
2½ in. ,,	3 9	2 7½	3 7
3 in. ,,	4 6	2 10	4 2½
3½ in. ,,	4 11½	3 7	4 11½
4 in. ,,	5 5½	4 0½	5 9

L.C.C. COATED DRAIN PIPES—London Price ex Works

	Pipe, angles, stock angles. s. d.	Bends, stock Branches. s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 4	5 1	8 0½
4 in. ,, ,,	4 10	5 8	10 0
5 in. ,, ,,	6 6	10 10	17 1
6 in. ,, ,,	6 8	13 2	21 9

Gasken for jointing, 38/6 per cwt.

	Per ton in London. £ s. d.		£ s. d.
IRON—			
Common bars	11 0 0	to	12 0 0
Staffordshire Crown Bars—Good merchant quality	11 10 0	to	12 10 0
Staffordshire Marked Bars	14 0 0	...	15 0 0
Mild Steel Bars	10 0 0	...	11 0 0
Steel Bars, Ferro-Concrete quality, basis price	10 0 0	...	11 0 0
Hoop iron, basis price	11 10 0	...	12 10 0
,, Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black—Ordinary sizes, to 20 g.	13 0 0	...	14 0 0
,, ,, ,, 24 g.	14 0 0	...	15 0 0
,, ,, ,, 26 g.	16 0 0	...	17 0 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	16 0 0	...	17 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	18 0 0	...	20 0 0

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—Ordinary sizes, 6 ft. to 9 ft. to 20 g.	16 10 0	...	17 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	17 0 0	...	18 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	20 0 0	...	21 0 0
Sheets Galvanised Flat, Best quality—Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	21 0 0	...	22 0 0
Best Soft Steel Sheets, 22 g. and 24 g.	23 0 0	...	25 0 0
Best Soft Steel Sheets, 26 g.	24 10 0	...	25 10 0
Cut Nails, 3 in. to 6 in.	18 0 0		

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)

	£ s. d.
LEAD—Sheet, English, 4 lb. and up	29 10 0
Pipe in coils	30 0 0
Soil pipe	33 0 0
Compo pipe	34 0 0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 5s. cwt. extra.

Old lead, ex London area, at Mills per ton	19 15 0

COPPER.

		s. d.
Seamless Copper tubes (basis)	per lb.	1 1½
Strong sheet	,,	1 0
Thin	,,	1 1
Copper nails	,,	2 3
Copper wire	,,	2 4

PLUMBERS' BRASS WORK.
Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/-	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1¼ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps	35/-	45/-	66/-	126/- ,,

TIN.—English Ingots, 2/6 per lb. SOLDER.—Plumber's 1/1. Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	0	2 8
,, ,, ,, in barrels	,,	0	2 10
,, ,, ,, in drums	,,	0	3 0
Boiled ,, ,, in barrels	,,	0	3 0
,, ,, ,, in drums	,,	0	3 3
Turpentine in barrels	,,	0	4 4
,, in drums (10 gals)	,,	0	4 6
Genuine Ground English White Lead, per ton 52		0	0

(In not less than 5-cwt. casks.)
Extra for 1-cwt. kegs over 5-cwt. casks 1s 5/9 cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

PAINTS, &c. (*contd.*)

GENUINE WHITE LEAD PAINT.

		£	s.	d.
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J." Brand, and other best brands (in 14 lb. tins) not less than 5 cwt. lots	per ton delivered	70	10	0
Red Lead, Dry (packages extra) ...	per ton	39	10	0
Best Linseed Oil Putty	per cwt.	0	15	0
Filicol	,,	0	15	6
Size. XD quality	½n.	0	3	6

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per ft.		Per ft.
15 oz. fourths ...	2½d.	32 oz. fourths	6½d.
15 ,, thirds ...	3½d.	32 ,, thirds	8½d.
21 ,, fourths ...	3½d.	Obscured Sheet, 15 oz.	3½d.
21 ,, thirds ...	4d.	,, ,, 21 ,,	4½d.
26 ,, fourths ...	4d.	Fluted 15oz.6½d.,21oz.	9d.
26 ,, thirds ...	6½d.	En'lled 15 oz. 4½d., 21 oz.	6d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
⅛ Rolled plate	4½d.
3/16 Rough rolled	5½d.
¼ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic Stippolyte, and small and large Flemish White	5½d
Ditto, tinted	8½d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½.
Tinted do.	6½c.

Cast plate is same price as rough rolled.

VARNISHES, &c.

		Per Gallon £	s.	d.
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	2	0
Best ditto	ditto	1	12	0
Best Japan Gold Size		0	12	6
Best Black Japan		0	10	6
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	6
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebine		0	9	0
Cuirass Black Enamel		0	7	0

BREEZE AND CLINKER AGGREGATES

WE have received a copy of a booklet on "The Properties of Breeze and Clinker Aggregates and Methods of Testing their Soundness" (Bulletin No. 5, Building Research Station, Watford). This gives a brief account of the properties of the materials in question, and indicates simple methods for testing them in order to minimise the risk of failures. These methods are designed to be applicable without laboratory apparatus, and should prove of real utility under field conditions.

In the summary to the report, it is pointed out that breeze and clinker aggregates contain widely varying amounts of combustible matter, which may be present as particles of entirely unburnt coal or in any intermediate state up to particles which are almost entirely ash. Coals which cause failure of a breeze or clinker concrete do so owing to the swelling movements they undergo while in the concrete. Concretes containing coals of this type suffer a progressive expansion during setting and maturing, and cracking ultimately results. Disintegration of breeze and clinker concretes due to the presence of sulphur compounds is, it is stated, probably rare. The corrosion of reinforcement in such concretes is no doubt primarily due to the permeability of the concretes, and the presence of sulphur is only objectionable in that it may accelerate corrosion. The setting of a breeze or clinker concrete may be much retarded if a large proportion of fine material is present and a large proportion of mixing water is required, though satisfactory setting and hardening ultimately occur if the aggregate is sound.

The Bulletin may be obtained, price 6d. net, from H.M. Stationery Office, Adastral House, Kingsway, London, and from the usual agents.

THE SCOTTISH BUILDER

NEW BUILDINGS

Aberdeen.—HOUSING.—The Scottish Board of Health has given consent to the Aberdeen Local Authority borrowing £703,711 in connection with the city's housing schemes.

Edinburgh.—BUILDINGS.—The Edinburgh Dean of Guild Court granted the following :—A. B. Fleming & Co., Ltd.—store and laboratory at Caroline-park, Granton: P. Macdonald —three bungalows at Traquair Park West, Corstorphine; Allan Walker—alterations and seven lock-ups at Bell's Mills, Belford-road; J. Miller—4 double bungalows in Willowbrae-road; J. B. Alexander—two double villas in Liberton-drive; Royal Edinburgh Hospital for Mental and Nervous Disorders—additions and alteration at 65, Morningside-drive; St. Cuthbert's Co-operative Association, Ltd.—alterations at Hutchison-terrace.

Leven.—FACTORY.—A site of 42 acres of ground at Balloch has been purchased by the Textile Dyes and Development Co., London. A silk factory is to be built on the site, and it is understood that operations will be commenced almost immediately.

Edinburgh.—TOWERS.—In connection with the scheme for electrifying Scotland, plans for the erection of 20 steel-latticed towers have been submitted to the Dean of Guild Court The petition, which was approved, came from the General Electricity Board. The towers are to be erected on Mortonhall estate. Other petitions granted were :—C. H. Dunlop—four semi-detached bungalows at Columba-road, Blackhall; S. Keppie—three double villas at 28-38, Liberton gardens; University Court of Edinburgh University—animal house in West Mains-road, Liberton; D Shields Crawford—alterations at 70-71, Princes-street.

Leith.—SLUM CLEARANCE.—The Public Health Committee of Edinburgh Town Council have considered a motion as to the advisability of a slum clearance for North Leith. The matter was remitted to the Medical Officer of Health for report.

Glasgow.—EXTENSIONS.—A new departure in hospital treatment in Scotland is to be introduced at the Victoria Infirmary, Glasgow. The Governors intend to build an annexe to the present buildings at a cost of £25,000. The new building will have accommodation for about 30 patients, but the structure will be planned so that additions can be made if these are found to be necessary. The architects are Messrs. Watson, Salmond & Gray, of Glasgow.

East Lothian.—HOUSING.—The Haddington Western District has paid grants for the improvement of 258 cottages under the Rural Housing Act, amounting to £23,645.

East Lothian.—IMPROVEMENTS.—The improvement and widening of the mid and coast roads has been under the consideration of the East Lothian Western District Committee for some time past. The Committee has now decided to adopt a recommendation for putting in hand as soon as possible, as a first instalment, the under-noted sections, subject to appropriate grants being received from the Ministry of Transport, viz. :—Coast road—from Cockenzie and Port Seton burgh boundary to Seton Dean, at an estimated cost of £1,416 14s. 6d. Mid road—(1) At Seton Mains, at the corner of the road to Cockenzie, estimated cost £1,417 10s. 6d.; (2) from No. 1 to station agent's house, estimated cost £536 7s. 6d.; (3) at Seton Castle, removal of west roundel, etc, cost £465 12s. 6d.; (4) at Lorne Bridge and east to Lyars-road, at an estimated cost of £3,622 10s.: (5) Lyars-road, estimated cost £523; (6) at Ballencrieff cross-roads, and east through Mungoswells to junction with Haddington-road, at Drem old toll, at an estimated cost of £13,502 11s. 8d.

Dundee.—BUILDINGS.—Plans and sections of the following proposed new buildings, etc., have been lodged at the office of the City Engineer :—Clepington-road—alterations for Mr. W. R. Falconer, Mr. Nelson T. Stewart, architect, 64, Reform-street; Reform-street, alterations for the General Accident Fire and Life Assurance Corporation, Ltd., Mr. G. P. K. Young, architect, 42, Tay-street, Perth.

Builder's Estate.

Mr. Thomas Scotland, builder, Dewar-street, Dunfermline, £2,287.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rate of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons' ‡ Bricklayers'‡ Plasterers'†
Aberdeen	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Airdrie	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Alexandria	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Bathgate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Coatbridge	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumbarton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumfries	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/6½	1/2
Dundee	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3 †1/2½
Dunfermline	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	‡1/2½ †1/2½
Edinburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/6½	1/7	1/6½	1/7	1/6½	1/6½	1/7	1/2
Glasgow	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2
Hawick	1/7	1/7	1/7	1/7-1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Inverness	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/- to 1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kirkcaldy	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Leith	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Perth	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Stirling	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	1/2½
Stirlingshire (Eastern District) ...	1/7½	1/9	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½

* The information given in this table is copyright. The rate of wages in the various towns in England and Wales are given on page 951.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	20	0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-
Fl t centering for concrete floor, including struts or hangers	"				50 0
Do. to beams	per ft. sup.				0 11
Centre for arches	"				1 6
Gutter boards and bearers	"				1 0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Dc.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights ; average size	" "	3	9

DOORS.

		1¼"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bea ers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail : average, 3 in. × 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roofwork	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3,3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	43	0
Do. Do. in flats	"	42	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Read lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	6
Do. Do. Sirapite	" "	2	9
Do. Do. Keen's	" "	4	0
Add saw lathing	" "	1	7
Add metal lathing	" "	2	6
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	" "	1	0
Obscured sheet	"	1	1
⅛-in. rolled plate	" "	0	9
¼-in. rough rolled or cast plate	" "	0	10½
¼-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 117, Chancery lane, W.C.2, from the documents available at the Companies' Registry.

JAMES & RILEY, LTD. (233,948). Registered October 10. Builders and building contractors, etc. Nominal capital, £500.

WESTMILL, LTD. (234,362). Registered October 26. Carpenters, joiners, woodworkers, etc. Nominal capital, £1,000.

G. & E. SUGDEN, LTD. (233,548). Registered September 24. Salem-street, Bradford. Concreters, plasterers, tilers, composition floor layers, etc. Nominal capital, £2,000.

FERNDOWN BRICK & TILE CO., LTD. (231,671). Registered July 2. Ferndown Brick Fields, Wimborne-road, Ferndown. Cement, brick and tile manufacturers. Nominal capital, £6,000.

SOUTHERN COUNTIES SAND & GRAVEL CO., LTD. (233,503). Registered September 21. Nominal capital, £100. J. Barnes, 4, London Wall Buildings, E.C.2.

SIMS & CO. (ISLE OF WIGHT), LTD. (234,472). Registered October 31. Trinity Works, Ventnor, I.O.W. Builders and contractors, mining and quarry owners, etc. Nominal capital, £5,000.

BUILDING MATERIALS DEVELOPMENT SYNDICATE, LTD. (234,596). Registered November 5. Manufacturers of bricks, tiles, pipes and pottery, etc. Nominal capital, £5,000. Dorothy Parker, Cadley, Simms-lane, Mortimer, Berks (clerk).

NORTHERN BUILDERS' SUPPLY CO., LTD. (234,592). Registered November 2. Builders' merchants and general agents. 36, Spring Gardens, Manchester. Nominal capital, £1,000.

SELECTION & DEVELOPMENT CORPORATION, LTD. (234,535). Registered November 2. 1/2, Great Winchester-street, E.C. General merchants, contractors and engineers, etc. Nominal capital, £500.

NORMANTONS, LTD. (234,506). Registered November 1. Builders and contractors, joiners, paviors, decorators, etc. Nominal capital, £10,000.

ROBSON & CO. (GOSFORTH), LTD. (234,508). Registered November 1. Contractors, builders, decorators and electricians, etc. Nominal capital, £500.

J. ALFRED PRATT & CO. (1928), LTD. (234,498). Registered November 1. Building material merchants. Woodford-road, Watford. Nominal capital, £200,000.

BRIDGEWATER BROS., LTD. (234,412). Registered October 29. Builders and contractors. Congreaves-road, Cradley Heath, Staffs. Nominal capital, £5,000.

PATHFELT AND FENCING, LTD. (F.2763). Registered November 3. Elizabeth-street, Sutton, St. Helens. Manufacturers of and dealers in metal, wood and composition fencing, etc. Nominal capital, £3,000.

MARSHALL HAMER, LTD (234,661). Registered November 8. Builder and contractor. 36, Victoria-street, Westminster. Nominal capital, £50,000.

DAVIES BROTHERS (TIMBER AND JOINERY), 1928, LTD. (234,669). Registered November 8. 225, Lea Bridge-road, Leyton, Essex. Joinery manufacturers and timber merchants carried on at Leyton by Davies Brothers (Timber and Joinery), Ltd. Nominal capital, £200,000.

JNO. CROAD, LTD. (234,630). Registered November 7. Portland-street, Portsea, Portsmouth. Builders and contractors, etc. Nominal capital, £20,000.

WM. BULLEN & SONS, LTD. (234,641). Registered November 7. Woodbridge-road, Guildford. Builders, contractors, etc. Nominal capital, £5,000.

R. E. MILLER & CO., LTD. (234,636). Registered November 7. Builders and contractors, etc. Nominal capital, £15,000. R. E. Miller, 3, Streatham Hill-road, S.W.

LEA VALLEY BRICK CO., LTD. (234,730). Registered November 10. 6, Southbury-road, Enfield. Nominal capital, £2,500.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

Ballater.—Rebuilding the bakehouse and shop in Golf-road. Mr. Wm. E. Gauld, F.R.I.B.A., chartered architect, 19, Diamond-street, Aberdeen. Quantities by the architect:—

Mason—
*J. E. Ross, Crathie

Carpenters—
*Duncan & Beaton, Ballater.

Slater—
*G. L. Grant, Ballater.

Plasterer—
*G. Mitchell, Ballater.

Painters—
*A. Brannen & Son, Aberdeen.

Bath.—Repair and improvements at Charmy Down Farm, for the T.C.:—
*J. Moore £254 10

Bath.—Construction of a ferro-crete bridge, for the T.C. City Engineer:—
*Lotz & Kier, Stoke-on-Trent £3,975

Bath.—Eight additional houses at Avon Park, for the T.C.:—
*Toogood & Son, Bath £3,010

Beccles.—Alterations to the infants school and new special subjects centre, for the East Suffolk E.C.:—
‡A. J. Gibbons, Crowfield £3,256 15 3

Bexhill.—Workshops at the Gas Works in Ashdown-road, and roof over gas purifiers, for the T.C. Borough Engineer and Surveyor:—

	Workshops.	Roof.
C. Parker, Bexhill	£680 0	£640 0
White Brothers, Bexhill ...	595 7	898 0
A. Radcliffe, Hastings	550 0	530 0
J. Bodle, Ltd., Bexhill	515 0	510 0
H. & J. Taylor, Hastings	499 0	493 0
A. F. Baker, Bexhill	498 19	513 4
Harrison Smith Bldg., Ltd., Birmingham	498 10	468 10
F. Banks, Bexhill	434 10	585 10
*Norman Smith & Son, Maidstone	425 0	435 0

Biggleswade.—Offices at Biggleswade, for the U.D.C. Mr. C. M. Robinson, Sanitary Surveyor:—

Styles & Son, Biggleswade	£189 17 6
T. M. Simons & Sons, Meppershell, Beds	185 0 0
G. & H. Segmer, Sandy, Beds ...	178 5 0
H. P. Bull & Son, Sandy, Beds...	166 10 0
C. D. Woodward, Biggleswade ...	166 0 0
W. F. Rand, Ashwell, Herts	165 0 0
*C. Handscombe, Langford, Beds	149 0 0

Buxton.—House in White Knowle-road. Mr. L. Ledger, architect, 40, Church-street, Stretford:—
*J. Bailey, Droylesden.

Callan.—Reconstruction of Callan Courthouse, for the C.C.:—

W. K. Cleere & Son	£2,441
Connolly & Cullen	2,041
*Roche, Morrissey & Kennedy	1,893

Carshalton.—Construction of an underground sewage pumping station and laying of 4-in. cast-iron pumping main, for the U.D.C. Mr. R. S. Davey, engineer:—
*Alexander Thomson & Co., Ltd., London £1,148 12 6

Castleford.—Reconstruction work at the Public Markets, for the U.D.C.:—

Mahogany Doors—
*Symingtons, Ltd. £541 13 0
Painting—
*F. Greatbatch & Son 158 10 6

Chelmsford.—Further 100 houses on the Boarded Barns estate, including fences, drains and paths, for the T.C.:—

Walter Cottage, Ltd., Coulsdon	£47,011 0 0
Henry Boot & Sons, Ltd., London	44,251 5 0
H. G. Acres, Ongar	43,888 4 8
R. Mansell, Croydon	43,444 0 0
Blackwell & Meyer, Bexley Heath	43,217 0 0
W. H. Finchman, Chelmsford	42,512 0 0
Sherrin, Ltd., High Holborn ...	42,353 2 8
Walter Jones & Sons, Ltd., London	41,710 0 0
Wood Bros. (Builders), Ltd., Forest Gate	41,135 18 0
E. C. P. Brand, Braintree ...	40,714 18 0
J. E. Jones, Ltd., Pontllanfraith, Mon.	40,686 4 0
D. Marven, Galleywood	39,968 1 7
A. Holmes, Chelmsford	39,500 0 0
Grosvenor Construction Co., London	38,984 0 0
Marshall Hamer, Ltd., London	37,972 0 0
Franklin & Co., Erith	37,294 0 0
Lawes, Cherry & Co., London	37,192 0 0
G. J. Hawkes & Sons, Chelmsford	36,575 10 0
W. L. Allen, Southend	36,575 0 0
Eadie, Towers & Co., Wolverhampton	36,456 0 0
Venning & Son, Eastleigh	36,420 0 0
Pearson & Blackwell, Ltd., Doncaster and Chelmsford ...	36,109 18 7
H. E. Pitt, Ltd., Sunderland ...	35,924 10 0
H. J. Gregory, Chapeltown, Leeds	35,236 18 6
S. E. Moss & Son, Chelmsford	34,978 0 0
*F. R. Absalom, Ltd., Cambridge	34,112 0 0
Borough Engineer's estimate...	42,348 0 0

Chelmsford.—Structural steel work in connection with the new County Offices, for the Essex C.C.:—
*Dorman, Long & Co. £9,072

Derby.—Construction of a new reservoir at Spondon, for the T.C.:—
*Yorkshire Hennebique Co. £5,864

Derby.—New offices for the "Derby Daily Express" in St. Peter's-street. Mr. T. H. Thorpe, F.R.I.B.A., architect, St. James-street:—
*J. H. Fryer, Derby.

Doncaster.—Widening of Hexthorpe-bridge, for the L. & N.E. Rly. Co.:—
*Fletcher & Co., Ltd., Mansfield.

Ely.—Cinema in Market-street, for the Ely Cinema Co., Ltd. Mr. F. Burdett Ward, L.R.I.B.A., architect, 8, South Brink, Wisbech. Quantities by the architect:—

J. S. Prior, Sutton	£6,252 17 8
J. Eggitt & Sons, March	6,075 0 0
Elworthy & Co., Ltd., Wisbech...	5,742 0 0
Fuller & Johnson, Soham	5,230 0 0
B. Lofts & Sons, Littleport	5,100 0 0
F. Tucker & Sons, Ely	5,000 0 0
S. S. Ambrose & Son, Ely	4,957 1 3
*H. F. Wykes, Ely	4,885 0 0

Faversham.—For houses for the R.D.C. Boughton, 2 houses; Teynham, alternatively for 12 or 24 houses. Mr. H. Caffyn, Sanitary Surveyor, 20, West-street:—

Two at Boughton—	
P. Wildash, Teynham	£720 0
Twelve at Teynham—	
P. Wildash, Teynham	4,020 0
Or 26	8,460 0
Twelve at Teynham—	
Stanley Reeves, Ltd., Whitstable	3,930 0
Or 24	7,760 0
Two at Boughton—	
G. Barton, Sittingbourne	634 0
Or 24	7,636 0
Two at Boughton—	
Blackwell & Myer, Erith	698 0
Twelve at Teynham—	
Blackwell and Myer, Erith	3,767 0
Or 24	7,419 0
Twelve at Teynham—	
Wood Bros., Forest Gate	3,846 12
Or 24	7,573 4
Two at Boughton—	
Franklin & Co., Bexley	615 0
Twelve at Teynham—	
Franklin & Co., Bexley	3,546 0
Or 26	7,599 0
Two at Boughton—	
Whiting Bros., Faversham	650 0
Twelve at Teynham—	
Whiting Bros., Faversham	3,780 0
*Or 24	7,200 0

Two at Boughton—
*G. Johnson & Son, Faversham ... £660 0
Twelve at Teynham—
*G. Johnson & Son, Faversham ... 3,901 0
Or 24 ..... 7,808 0

Guildford.—4 non-parlour type cottages at Pirbright, for the R.D.C. Mr. J. W. Wilton, Surveyor:—
*W. J. Holt, Hambledon £1,556 5
(Subject to approval of M.H.)

Halifax.—New potting shed at the People's Park, for the C.B. Mr. A. C. Sipple, Borough Engineer and Surveyor:—
*Geo. A. Pickles, Halifax.

Harwich.—Converting the old Royal Hotel into flats, for the T.C. Mr. F. Harold French, Borough Engineer:—
*H. Harrison, Harwich £580 2 9

Hockley.—Enlargement of Hockley High-road Council School, for the Essex E.C.:—
*S. E. Adams, Westcliff £2,700

Ipswich.—New junior mixed school on the Gainsborough housing estate, for the E.C.:—
‡Pollard & Skerritt £8,005

Keynsham.—Improvements at the Keynsham Poor Law Institution, for the B.G.:—
*Wallace Wiggins & Sons, Keynsham £277 10

Laleham.—18 houses and the making of a roadway at Staines-road, for the Staines R.D.C.:—
*Franklin & Co., Erith £6,200

Leeds.—First section of new elementary school, for the E.C. Mr. F. Broadbent, architect:—
*P. Rhodes, Ltd.

Leeds.—Additional cloakroom accommodation at the Girls' High School, Headingley-lane, for the Governors:—
*L. Harpham.

Leek.—104 houses on the Haregate housing site, for the U.D.C. Mr. W. E. Beacham, surveyor:—
‡Eadie Towers & Co., Wolverhampton £35,472
(For 104 houses, not 10, as stated in our last issue.)

Leicester.—Repairs to footbridge in Hutchinson-street:—
*Richards & Son, Leicester £293

Lichfield.—Provision of new counter, desks, fittings, etc., for Lloyds Bank:—
‡R. Bridgeman & Sons, Lichfield.

Liverpool.—New school in Evered-avenue, for the E.C.:—
‡J. Williams (Liverpool), Ltd. £29,488

Llandovery.—Additions to the County School, for the Carmarthenshire C.C. Mr. W. Vincent Morgan, A.R.I.B.A., County Architect, Carmarthen:—
J. M. Evans, Carmarthen £8,300
Glanmor Joinery Works 8,000
Rees Davies, Carmarthen 6,550
Charles Thomas & Co., Llandilo 6,489
R. L. Rees, Brynamman 6,478
G. Mercer & Sons, Llanelly 6,475
Isaac Jones, Llanelly 6,310
J. T. Williams, Llanelly 6,200
Lewis Davies, Penygroes 5,856
*D. Davies, Llandovery 4,996

London.—Cleaning and painting schools, for the L.C.C.:—

	Tender Basis "A."	Alternative tender Basis "B."
Bostall-lane (Woolwich, E.)—		
D. C. Bowyer, Belvedere	£1,085 18	*£1,085 18
(Architect's estimate, £1,145.)		
The Ennersdale (Lewisham, E.)—		
D. C. Bowyer, Belvedere	£1,078 11	*£1,078 11
(Architect's estimate, £1,179.)		
Gifford-street (Islington, W.)—		
Mond Staffordshire Refining Co., Ltd., London	£1,078 3	*£1,130 11
(Architect's estimate, £1,383.)		
Kilmorie-road (Lewisham, W.)—		
J. Scott Fenn, Ltd., London	£1,189 0	*£1,234 16
(Architect's estimate, £1,325.)		
The Marlborough (Chelsea)—		
W. J. Dixon & Son, London	£1,291 0	*£1,315 0
(Architect's estimate, £1,359.)		
Middle-row (Kensington, N.)—		
Sims & Russell, London	£1,273 0	*£1,354 0
(Architect's estimate, £1,398.)		
Rosendale-road Elementary and Turney-road (P.D.), Norwood—		
Albert Soden, London...	£1,034 12	*£1,081 7
(Architect's estimate, £1,444.)		
Sebbon-street (Islington, S.)—		
R. Woollaston & Co., London	£1,048 14	*£1,148 14
(Architect's estimate, £1,228.)		
Upper Hornsey-road (Islington, N.)—		
Stevens & Sons, London	£1,490 0	*£1,620 0
(Architect's estimate, £1,579.)		
Vernon-square (Finsbury)—		
A. H. Inns, Ltd., London	£1,364 0	*£1,374 0
(Architect's estimate, £1,457.)		

London.—Repairs to 51, 52 and 53, Thorncroft-street, for the Lambeth B.C.:—
W. & P. J. Young £720 0
C. & R. Harding 380 0
J. Appleby & Sons, Ltd. 358 10
W. A. King & Sons (Brixton), Ltd. 336 10
Clarke & Williams 335 12
Bridge & Co. 257 0
*H. D. Harding, Ltd. 225 0
(All of London.)

London.—Alterations to premises, at Stockwell Green Depot, for the Lambeth B.C. Borough Engineer:—
T. F. Robinson £403 5 0
H. Parkinson & Co. 354 2 6
Sayce & Bransby 347 0 0
Lister Mawby (Builders), Ltd. ... 342 10 0
Greenaway & Son 330 0 0
H. D. Harding, Ltd. 325 10 0
J. Appleby & Sons, Ltd. 323 6 0
Wood & Co. (Brixton), Ltd. 315 0 0
W. & J. Cooper 312 14 11
Sykes & Son, Ltd. 306 15 0
C. & R. Harding 305 12 1
Crabb & Son 305 0 0
F. Webster & Son 299 17 7
W. A. King & Sons (Brixton), Ltd. 292 0 0
J. Crewdson, Horley, Surrey ... 289 14 10
David Pierson & Co., Ltd. 289 0 0
W. Shurmur & Sons, Ltd. 288 0 0
H. F. Mortimer 283 0 0
W. Bickerton & Son, Ltd. 275 9 6
G. Brittain & Sons, Ltd. 268 0 0
*F. Liley 259 0 0
(All of London.)

Luton.—Erection of the Lee Ward branch library, for the T.C.:—
* T. Day & Son £897

Manchester.—Reconstruction of shop at 104, Wilmslow-road, Rusholme, for Mr. J. Parry. Downing-street, Ardwick. Messrs. Oakley & Sanville, architects, 60, King-street:—
Plasterer—
*Peter Lynch.
Electric Light—
*J. Simmons.
Plumber and Painter—
*W. Ryder.
Brickwork—
*Walley Kilner.
(All of Manchester.)

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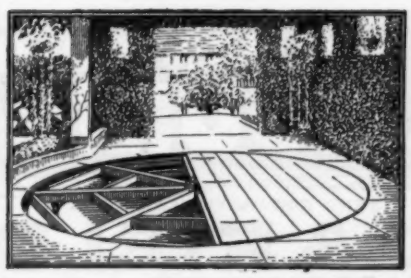

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Manchester.—Structural alterations to the "Burrel Arms," West-street, Crewe, for Messrs. Threlfall's Brewery Co., Ltd., Cooke-street, Salford. Mr. B. Waterhouse, architect:—
*F. Cotclough, Crewe.

Mepal.—New bridge, for the Isle of Ely C.C.:—
*A. E. Farr, London £7,224 6

Morley.—Alterations to the "Dyers Arms," Batley Carr, and the "Globe Inn," Dewsbury, for Messrs. Strettons Derby Breweries, Ltd.:—
*J. W. Binks & Sons, Leeds.

Northampton.—8 A2 and 8 A3 houses, on the St. David's site, for the C.B.:—
Chowns, Ltd. £6,555
(In lieu of tender withdrawn.)

Nottingham.—Masonic hall, in Goldsmith-street, for the Nottinghamshire Masonic Hall Co. (1924), Ltd. Messrs. J. Howitt & Son, architects and surveyors, Bentinck-buildings, Wheeler Gate. Quantities by Messrs. Barnes, Booth and Richardson, King-street, Nottingham:—
†J. W. Stamp & Co., Nottingham.

Nottingham.—New central school for girls, at Gamston-crescent and Perry-road, on the Sherwood estate, for the City Council:—
‡Harper & Green £15,360

Oxford.—Goods shed at Morris Cowley Station, for the G.W.R. The Engineer, Paddington Station:—
*H. & C. Spackman, Swindon.

Petersfield.—8 houses at Buriton, for the R.D.C.:—
*P. Cooper, Littlehampton £2,987

Preston.—Alterations and additions to the Technical School, Corporation-street, for the Building Committee of the Harris Institute, Preston. Mr. E. J. Andrew, architect, 33, Winckley-square:—
*T. Croft & Sons, Preston £34,347 8

Rugby.—Alterations and redecorations at 5, High-street, for the U.D.C. Mr. J. H. Sharp, surveyor, Benn-buildings:—
F. Hollowell £1,150 0
C. Cockerell 1,052 0
Foster & Dicksee 1,040 0
J. Parnell 1,011 10
*Walton & Son 990 0
W. H. Adams 970 0
(All of Rugby.)

Salford.—Foundations and structural work in connection with the installation of large turbo alternator at the Agecroft power station, for the T.C. Mr. L. Romero, City Electrical Engineer:—
*W. Gornall & Sons, Ltd., Bolton £2,275

Salford.—14 firemen's dwelling houses at the Central Fire Station, for the City Council. City Engineer:—
*A. Rafferty, Salford £13,398

Sheffield.—Schools on land off Prince of Wales-road, Manor estate, for the Rev. Canon Dolan. Mr. J. E. Whitehead, architect, 34, Goddard Hall-road:—
*J. Hoskins & Son, Liversedge £10,000

Southend-on-Sea.—Rebuilding of 66-68, High-street, for Messrs. H. Garon, Ltd., caterers. Mr. George F. Grover, architect, The Broadway, Thorpe Bay:—
Building—
*J. Wilson (Thorpe Bay), Ltd.
Steelwork—
*Sanders & Forster, Ltd., Barking.
Floors—
*Siegwart Fireproof Flooring Co., Ltd., London.

Sowerby Bridge.—16 subsidy houses at Beechwood, for the Council:—
Bricklayers—
*Marshall & Rushworth, Elland.
Joiners—
*W. H. Leah & Son, Triangle.
Slaters and Plasterers—
*T. Dyson & Son, Sowerby Bridge
Plumber and Glazier—
*Sutcliffe Scott, Queensbury.
Painters—
*W. Lumb & Son, Sowerby Bridge
Electricians—
*J. Harrison & Co., Halifax.

Stoke-on-Trent.—Overhead wiring and services to 64 new houses on the Sutton estate, Trent Vale, for the T.C. City Electrical Engineer, St. George's-chambers, Kingsway:—
*Barnett & Soans, Stoke-on-Trent... £184 13 4

Stowmarket. — Enlargement of Stowmarket Secondary School, for the East Suffolk E.C.:—
‡A. J. Gibbons, Crowfield £1,640

Torquay.—For (1) reconstruction of public convenience at Tram Terminus, St. Marychurch; (2) new public convenience for gentlemen at Oddicombe Beach; (3) extension of existing ladies' convenience at Oddicombe Beach; (4) new public convenience for ladies and gentlemen at Beacon Hill, for the T.C. Mr. H. A. Garrett, Borough Engineer. Quantities by Messrs. Harris & Hills, Hyde-road, Paignton:—
No. 1—
*Torquay Building Co.
No. 2—
*H. C. Jackman.
No. 3—
*H. C. Jackman.
No. 4—
*Unity Builders, Ltd.
(All of Torquay.)

Trawden.—Extensions to the works of Messrs. J. Wilkinson. Mr. E. A. Foulds, architect, Stone Bridge, Colne:—

Masons—
*Cross & Lawson.
Joiners—
*Edward Wates.
Seaters—
*Wm. Stanworth & Son, Burnley.
Patent Glazing—
*Charles Cook.
Milling Work—
*E. A. Foulds.

(All of Colne.)

Tuam.—10 houses, for the Town Commissioners:—

D. T. Dwyer	£2,965 0
M. Hoban, Gorbally, & F. Hoban, Tuam	2,377 10
*J. Moggan	2,375 0

Upham (Hants).—Alterations and additions at West Hall. Mr. A. J. Lewis, architect and surveyor, Portsmouth:—

John Lay & Co., Portsmouth	£1,418 0
Wise & Lansdell, Winchester	1,343 0
*Hale Bros., Bishops Waltham	1,340 0
Scammell & Quinton, Southsea	1,229 14

Uxbridge.—Thirty houses at Harefield, for the R.D.C.:—

†Grosvenor Construction Co., London.

Uxbridge.—New ward block at the infirmary, for the B.G.:—

Prowting, Ruislip	£17,490
*G. H. Dibblin, Dartford	17,249

Warrington.—Sub-station on the Bewsey housing estate, for the C.B. Mr. A. M. Ker, Borough Engineer and Surveyor. Quantities by Mr. W. T. Davenport, Queen's-chambers:—

*Cooper & Barnes, Warrington.

Warrington.—Tennis pavilion, conveniences and shelter at St. Elphin's Park, for the T.C. Mr. A. M. Ker, Borough Engineer and Surveyor. Quantities by Mr. W. T. Davenport, Queen's-Chambers:—

*T. & C. Rigby, Warrington.

Whittlesey.—New bridge at Dog-in-a-Double, for the Isle of Ely C.C.:—

*A. E. Farr, London £7,776 18 6

Wrexham.—Extensions to shop in Butter Market, for the Corporation:—

*Miles Bros., Rhos.

York.—Roads and sewers on the Burton-lane estate, for the Housing Committee:—

‡J. Parkin, Leeds £22,459 13 7

Street Widening at Manchester.

Preliminary steps are being taken for the setting back of Market-street, Manchester, opposite Messrs. Lewis's. It is intended that the big block comprising a number of shops shall be pulled down, and the adjoining warehouse of Messrs. Rylands & Sons, Ltd., will then be reconstructed. Messrs. Rylands have agreed to set back their property so as to make that portion of Market-street 75 ft. wide. The property to be demolished includes two hotels, 12 shops, and a bank, and the reconstruction of the huge warehouse may cost, says the *Manchester Daily Dispatch*, about £1,000,000.

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